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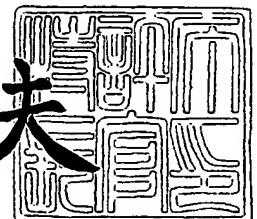
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【プルーフの要否】 要

【書類名】 明細書

【発明の名称】 ドメインを形成するヒト由来のタンパク質またはその用途

【特許請求の範囲】

【請求項 1】

配列番号 1 に記載されたアミノ酸配列からなるタンパク質又はその塩。

【請求項 2】

配列番号 3、5、7、9 のいずれか一つに記載されたアミノ酸配列からなるタンパク質又はそれらの塩。

【請求項 3】

配列番号 7 に記載されたアミノ酸配列の N 末端から 0 個～10 個のアミノ酸残基が欠損し、更に C 末端から 0 個～5 個のアミノ酸残基が欠損したアミノ酸配列を有し、アミノ酸残基数が 92～106 であるタンパク質又はそれらの塩。

【請求項 4】

請求項 1、2 又は 3 に記載のタンパク質のアミノ酸配列において、1 若しくは数個のアミノ酸が欠失、置換又は付加されたアミノ酸配列からなり、請求項 1、2 又は 3 に記載のタンパク質のいずれかと実質的に同一の機能を有するタンパク質又はそれらの塩。

【請求項 5】

請求項 1～請求項 4 に記載されたタンパク質のいずれか 1 つのタンパク質のアミノ酸配列をコードするポリヌクレオチドを含有するポリヌクレオチド。

【請求項 6】

配列番号 2、4、6、8、10 のいずれか一つに記載された塩基配列を含有する請求項 5 に記載のポリヌクレオチド。

【請求項 7】

請求項 5 又は請求項 6 に記載のポリヌクレオチドを含有する発現系。

【請求項 8】

請求項 5 又は請求項 6 に記載のポリヌクレオチドを含有する組換えベクター。

【請求項 9】

請求項 8 に記載の組換えベクターで形質転換させた形質転換体。

**【請求項 10】**

請求項 1～請求項 4 のいずれか一つに記載のタンパク質に対する抗体。

**【請求項 11】**

請求項 10 に記載の抗体を含む医薬。

**【請求項 12】**

請求項 9 に記載の形質転換体を培養し、タンパク質を生成させる工程を含む、請求項 1～請求項 4 のいずれか一つに記載のタンパク質またはそれらの塩の製造方法。

**【請求項 13】**

無細胞タンパク質合成系を用いることを特徴とする請求項 1～請求項 4 のいずれか一つに記載のタンパク質又はそれらの塩の製造方法。

**【請求項 14】**

請求項 1～請求項 4 のいずれか一つに記載のタンパク質と候補物質とを接触させる工程と、前記タンパク質と候補物質とが相互作用をするかどうかを確認する工程とを含む請求項 1～請求項 4 のいずれか一つに記載のタンパク質またはそれらの塩及び／又は請求項 1～請求項 4 のいずれか一つに記載のタンパク質のアミノ酸配列を含んだ天然に存在するタンパク質又はそれらの塩と相互作用する物質のスクリーニング方法。

**【請求項 15】**

請求項 10 に記載の抗体を用いた請求項 1～請求項 4 のいずれか一つに記載のタンパク質又はそれらの塩の定量方法。

**【請求項 16】**

請求項 15 に記載の定量方法を用いた、請求項 1～請求項 4 のいずれか一つに記載のタンパク質またはそれらの塩と相互作用をする物質のスクリーニング方法。

**【請求項 17】**

請求項 1～請求項 4 のいずれか一つに記載のタンパク質を細胞内で発現させる工程と、当該細胞内における遺伝子の発現状態を調べる工程と、を含む、請求項 1～請求項 4 のいずれか一つに記載のタンパク質と関連する遺伝子を特定する方

法。

【請求項 18】

請求項 1～請求項 4 のいずれか一つに記載のタンパク質の立体構造に関する情報を用いて、前記タンパク質の活性部位を決定する工程と、当該活性部位と相互作用する化合物をコンピュータ上で特定する工程とを含む請求項 1～請求項 4 のいずれか一つに記載のタンパク質またはそれらの塩及び／又は請求項 1～請求項 4 のいずれか一つに記載のタンパク質のアミノ酸配列を含んだ天然に存在するタンパク質又はそれらの塩と相互作用する化合物のスクリーニング方法。

【請求項 19】

前記タンパク質の立体構造に関する情報が、立体構造座標表 1～20 のいずれかに記載の立体構造情報のうちアミノ酸番号 8～98 番目のアミノ酸残基からなるタンパク質の立体構造情報である請求項 18 に記載のスクリーニング方法。

【請求項 20】

立体構造座標表 1 に記載の立体構造情報のうち、(Val26, Lys27, Glu47, Arg67, Lys83, Ser86) のアミノ酸残基に相当する部分の情報を用いる請求項 18 に記載のスクリーニング方法。

【請求項 21】

請求項 18～請求項 20 のいずれか一つに記載されたスクリーニング方法によって、特定された活性部位と相互作用する化合物を候補化合物として用意し、

請求項 1～請求項 4 のいずれか一つに記載されたタンパク質と候補物質とを接触させる工程と、前記タンパク質と候補物質とが相互作用をするかどうかを確認する工程とを含む請求項 1～請求項 4 のいずれか一つに記載されたタンパク質またはそれらの塩及び／又は請求項 1～請求項 4 のいずれか一つに記載のタンパク質のアミノ酸配列を含んだ天然に存在するタンパク質又はそれらの塩と相互作用する物質のスクリーニング方法。

【請求項 22】

立体構造座標表 1～20 のいずれかに記載されたタンパク質の立体構造のうちアミノ酸番号 8～98 番目のアミノ酸残基のタンパク質の立体構造情報に関する情報を用いて、請求項 1～4 のいずれか一つに記載のタンパク質のアミノ酸配列

と30%以上の相同性を有するアミノ酸配列を有する構造未知タンパク質のホモロジーモデリングを行い、前記構造未知タンパク質の立体構造を推定する方法。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】

本発明は、ドメインを形成するヒト由来のタンパク質、それを含有するポリヌクレオチド、そのタンパク質に対する抗体、それらを用いた活性化化合物のスクリーニング方法などに関する。

【0002】

【従来の技術】

近年、ヒトゲノム計画に代表されるさまざまなモデル生物のゲノム塩基配列が次々に解読されている。これらのゲノム配列情報から抽出される遺伝子について、個々の遺伝子にコードされたタンパク質の立体構造を体系的に明らかにし、構造と機能の関係を明確にしようとする“構造ゲノム科学”が、新たな研究分野として急速に立ち上がり、世界各国で大規模なプロジェクトが進行している。

この構造ゲノム科学において、解析対象となるタンパク質数は10万種類に及ぶとも見られており、その全立体構造の決定を目標とするのは現在の技術レベルでは未だ現実的ではない。

【0003】

そこで、まず対象タンパク質を妥当な数に絞り、「代表的な構造」を選ぶことが必要である。網羅的な立体構造解析は、例えばa) 対象とするタンパク質のセットとして比較的小さいものに特定する、b) 超好熱性古細菌、高度好熱菌、マイコプラズマ等のゲノムサイズの小さい生物種を特定する、或いはc) シグナル伝達や遺伝子発現に関与するタンパク質、疾病関連遺伝子産物タンパク質等、生命現象を特定する等、様々な視点から解析対象を選定したプロジェクトが開始されている。

このような研究の流れにおいては、最初のステップとして、約1万種類とも推測されているファミリー(アミノ酸配列が約30~35%の相同性を有するものをファミリーとして分類)のすべてについて代表的な立体構造を1つ以上決定するこ

とを1つの目標としている。ある代表的な立体構造(基本構造)があれば、同じファミリーに属する他のタンパク質の構造も、ホモロジーに基づくモデリングにより類推することが可能となる。

このプロジェクトの中で、機能ドメインの三次元構造のタイプ、又はトポロジー(基本構造：フォールド)に注目し、タンパク質の基本構造単位で機能との相関を解明しようとする研究が注目されている。

#### 【0004】

複数のドメインを有するタンパク質の場合、機能ドメインがモジュールのように組み合わせられてきているため、あるドメインがさまざまなタンパク質のなかに違ったドメインとの組み合わせで現れることがしばしば見られる。また、一次配列上のホモロジーが検出されなくても同じ基本構造をもつことはめずらしくない。従って、基本構造の数はタンパク質のファミリーの数よりもかなり少ないはずであり、それぞれの基本構造が分子機能と関連付けられると期待される。この基本構造の数は、約1万～2万種類と予測されており、このオーダーの解析対象であれば、全対象タンパク質の立体構造を決定することも十分可能になる。

#### 【0005】

このようにして得られるタンパク質の立体構造と機能に関する情報は、生体機能の解明に新たな知見を与え、医薬品等の開発(例えば、ラショナルドラッグデザインやバーチャルスクリーニングによる開発)を飛躍的に発展させるものであり、産業界においても非常に有益である。

#### 【0006】

##### 【発明が解決しようとする課題】

しかしながら、タンパク質の立体構造解析には、多くの時間と労力、費用を要するのが実情である。網羅的且つ体系的な構造解析を目指す構造ゲノム科学研究においては、構造解析のハイスループット化を図ることが重要な課題である。

#### 【0007】

タンパク質の立体構造解析には主にNMR法およびX線結晶構造解析法が使用されている。

タンパク質をNMRを用いて立体構造解析を行うためには、サンプルの分子量

は約20000以下（アミノ酸残基で約200個以下）であることが好ましい。X線解析によって立体構造解析を行う場合にも、結晶作成のためにタンパク質の性状に制限がある。

構造解析に適したタンパク質を得るためにタンパク質をランダムに分割すると、切断する部位が $\beta$ シートや $\alpha$ ヘリックス構造をとるアミノ酸配列中にあると、多くのタンパク質は生理的に意味のある構造が変形したり、ひも状になり構造を取らなかったり、あるいは凝集することになる。このように本来生体内でとる構造を有しないタンパク質の立体構造を解析しても意味がない。したがって、立体構造の解析に意味のあるドメインを形成するタンパク質を取得することが望まれる。

構造解析に適した、ドメインを有するタンパク質（以下、「ドメインを形成するタンパク質」という）を発現させるためには、ドメイン境界の位置に関する情報が必要である。一般に、このドメイン境界はアミノ酸配列の相同性などを手がかりにして予測される。このようにして予測されたドメイン領域のアミノ酸配列に基づいてタンパク質の発現を行っても実際に構造をとる（フォールドする）ドメインを形成するタンパク質が得られる確率は非常に低く、ドメイン発現が構造解析のボトルネックの1つとなっている。

本発明の対象であるCAP-Gly様ドメインを形成するタンパク質についても、これまでは取得されておらず、またその構造情報も未知であり、これらを創薬等に利用することはできなかった。

#### 【0008】

##### 【課題を解決するための手段】

本発明は、このような状況に鑑みてなされたもので、下記のようなタンパク質、その製造方法、それをコードするポリヌクレオチド、そのタンパク質に対する抗体、それらを用いるスクリーニング方法などを提供する。

- (1) 配列番号1に記載されたアミノ酸配列からなるタンパク質又はその塩。
- (2) 配列番号3、5、7、9のいずれか一つに記載されたアミノ酸配列からなるタンパク質又はそれらの塩。
- (3) 配列番号7に記載されたアミノ酸配列のN末端から0個～10個のアミノ



酸残基が欠損し、更にC末端から0個～5個のアミノ酸残基が欠損したアミノ酸配列を有し、アミノ酸残基数が92～106であるタンパク質又はそれらの塩。

(4) (1)、(2)又は(3)に記載のタンパク質のアミノ酸配列において、1若しくは数個のアミノ酸が欠失、置換又は付加されたアミノ酸配列からなり、(1)、(2)又は(3)に記載のタンパク質と実質的に同一の機能を有するタンパク質又はそれらの塩。

(5) (1)～(4)に記載されたタンパク質のいずれか1つのタンパク質のアミノ酸配列をコードするポリヌクレオチドを含有するポリヌクレオチド。

(6) 配列番号2、4、6、8、10のいずれか一つに記載された塩基配列を含有する(5)に記載のポリヌクレオチド。

(7) (5)又は(6)に記載のポリヌクレオチドを含有する発現系。

(8) (5)又は(6)に記載のポリヌクレオチドを含有する組換えベクター。

(9) (8)に記載の組換えベクターで形質転換させた形質転換体。

(10) (1)～(4)のいずれか一つに記載のタンパク質に対する抗体。

(11) (10)に記載の抗体を含む医薬。

(12) (9)に記載の形質転換体を培養し、タンパク質を生成させる工程を含む、(1)～(4)のいずれか一つに記載のタンパク質またはそれらの塩の製造方法。

(13) 無細胞タンパク質合成系を用いることを特徴とする(1)～(4)のいずれか一つに記載のタンパク質又はそれらの塩の製造方法。

(14) (1)～(4)のいずれか一つに記載のタンパク質と候補物質とを接触させる工程と、前記タンパク質と候補物質とが相互作用をするかどうかを確認する工程とを含む(1)～(4)のいずれか一つに記載のタンパク質またはそれらの塩及び／又は(1)～(4)のいずれか一つに記載のタンパク質のアミノ酸配列を含んだ天然に存在するタンパク質又はそれらの塩と相互作用する物質のスクリーニング方法。

(15) (10)に記載の抗体を用いた(1)～(4)のいずれか一つに記載のタンパク質又はそれらの塩の定量方法。

(16) (15)に記載の定量方法を用いた、(1)～(4)のいずれか一つに

記載のタンパク質またはそれらの塩と相互作用をする物質のスクリーニング方法

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(17) (1) ~ (4) のいずれか一つに記載のタンパク質を細胞内で発現させる工程と、当該細胞内における遺伝子の発現状態を調べる工程と、を含む、(1) ~ (4) のいずれか一つに記載のタンパク質と関連する遺伝子を特定する方法

。

(18) (1) ~ (4) のいずれか一つに記載のタンパク質の立体構造に関する情報を用いて、前記タンパク質の活性部位を決定する工程と、当該活性部位と相互作用する化合物をコンピュータ上で特定する工程とを含む (1) ~ (4) のいずれか一つに記載のタンパク質またはそれらの塩及び／又は (1) ~ (4) のいずれか一つに記載のタンパク質のアミノ酸配列を含んだ天然に存在するタンパク質又はそれらの塩と相互作用する化合物のスクリーニング方法。

(19) 前記タンパク質の立体構造に関する情報が、立体構造座標表 1 ~ 20 のいずれかに記載の立体構造情報のうちアミノ酸番号 8 ~ 98 番目のアミノ酸残基からなるタンパク質の立体構造情報である (18) に記載のスクリーニング方法

。

(20) 立体構造座標表 1 に記載の立体構造情報のうち、(Val26, Lys27, Glu47, Arg67, Lys83, Ser86) のアミノ酸残基に相当する部分の情報を用いる (18) に記載のスクリーニング方法。

(21) (18) ~ (20) のいずれか一つに記載されたスクリーニング方法によって、特定された活性部位と相互作用する化合物を候補化合物として用意し、

(1) ~ (4) のいずれか一つに記載されたタンパク質と候補物質とを接触させる工程と、前記タンパク質と候補物質とが相互作用をするかどうかを確認する工程とを含む (1) ~ (4) のいずれか一つに記載されたタンパク質またはその塩及び／又は (1) ~ (4) のいずれか一つに記載のタンパク質のアミノ酸配列を含んだ天然に存在するタンパク質又はそれらの塩と相互作用する物質のスクリーニング方法。

(22) 立体構造座標表 1 ~ 20 のいずれかに記載されたタンパク質の立体構造のうちアミノ酸番号 8 ~ 98 番目のアミノ酸残基のタンパク質の立体構造情報に

関する情報を用いて、(1)～(4)のいずれか一つに記載のタンパク質のアミノ酸配列と30%以上の相同性を有するアミノ酸配列を有する構造未知タンパク質のホモロジーモデリングを行い、前記構造未知タンパク質の立体構造を推定する方法。

#### 【0009】

##### 【発明の実施の形態】

##### (本発明のタンパク質)

本発明のタンパク質は、立体構造をもったドメインを形成するタンパク質である。本発明は、より具体的には、配列番号1、3、5、7、9のいずれか一つに記載されるCAP-Gly様ドメインタンパク質、又は配列番号7に記載されたアミノ酸配列のN末端から0個～10個のアミノ酸残基が欠損し、更にC末端から0個～5個のアミノ酸残基が欠損したアミノ酸配列を有し、アミノ酸残基数が92～106であるタンパク質（すなわち、配列番号1のアミノ酸配列のN末端に0～10個、C末端に0～5個のアミノ酸残基を付加したタンパク質）に関する。

以下、本発明のタンパク質の機能などについて説明する。

#### 【0010】

##### (CAP-Glyドメイン)

CAP-Glyは、cytoskeletal-associated-protein-glycine-conserved domain の略であり、細胞内小器官や染色体を細胞内の微小管に結合する役割を果たすタンパク質を構成する。CAP-Glyドメインは保存性の高い、約42残基からなるグリシンに富んだ領域を含む [Riehemann K., Sorg C. Sequence homologies between four cytoskeleton-associated proteins. Trends Biochem. Sci. 18: 82-83(1993)]。このドメインを含むタンパク質としては、細胞内小胞体と微小管を接続する中間径フィラメントに関連する160 kD のタンパク質のレスチン (restin) (細胞質のリンカータンパク質170 または CLIP-170とも呼ばれる)、脊椎動物のダイナクチン [150 kD のダイニン関連ポリペプチド (DAP)]、アクティベータIの主要な成分であるDrosophila glued複合体、有糸分裂期の微小管の形成・安定化および対合期における紡錘体融合に必要と考えられる酵母タンパク質BIK1、酵母タンパク質NIP100 (NIP80)、ヒトタンパク質CKAP1/TFCB、Schizosaccharomy

ces pombe タンパク質の alpl1、C. elegans のタンパク質と推定される F53F4.3 などが知られている。

なお、疾病との関連については、本発明のドメインを有する KIAA0849 タンパク質が細胞骨格にアソシエートするタンパク質であることから、細胞周期制御に関係するドメインであり、特に各種の癌関連疾患の原因遺伝子であると予測することが容易である。事実、本発明の実施例に示すように、本発明のタンパク質を培養動物細胞に遺伝子導入する事によって、細胞は増殖抑制性の制御を受ける。すなわち、本発明のタンパク質は癌抑制遺伝子産物としての機能を有している。癌抑制遺伝子に変異が起き増殖抑制活性が低下すると、癌が発病することはよく知られた事実である(田矢洋一ほか Bio Science 用語ライブラリー 癌遺伝子・癌抑制遺伝子 pl13-115 羊土社 2000)。網膜芽細胞腫を引き起こすレチノブラストーマ遺伝子が有名である(Weinberg RA. The retinoblastoma protein and cell cycle control. Cell 81, 323-330 1995)。

#### 【0011】

殊に、本発明に利用した遺伝子 (KIAA0849) は、ヒトのターバン腫瘍症候群の原因遺伝子であることが知られている (Nature Genet. 25,160-165 2000)。KIAA0849の発現するタンパク質のどのドメインが疾病の原因であるかは未だ不明であるが、本発明で例示した、本発明のタンパク質の癌抑制遺伝子的な機能を考えると、CAP-Gly様ドメインタンパク質が本疾病の原因であることが予測される。本発明の用途としては、少なくともターバン症候群に対する薬物のスクリーニングへの利用や、立体構造情報を利用したの薬物の最適化が想定される。すなわちCAP-Gly機能を有するドメインタンパク質と相互作用を有する化合物は各種癌関連疾患の予防・治療に有効に用いられ得る。

#### 【0012】

また、本発明は、配列番号 1、3、5、7、9 のいずれか一つに記載のいずれか一つに記載されたアミノ酸配列、又は配列番号 7 に記載されたアミノ酸配列の N 末端から 0 個～10 個のアミノ酸残基が欠損し、更に C 末端から 0 個～5 個のアミノ酸残基が欠損したアミノ酸配列において、1 若しくは数個 (1～9 個、好ましくは 1～5 個、さらに好ましくは 1～2 個) のアミノ酸が欠失、置換又は付

加されたアミノ酸配列からなり、配列番号1、3、5、7、9配列番号7に記載されたアミノ酸配列のN末端から0個～10個のアミノ酸残基が欠損し、更にC末端から0個～5個のアミノ酸残基が欠損したアミノ酸配列のいずれか一つに記載されたアミノ酸配列からなるタンパク質のいずれかと実質的に同一の機能を有するタンパク質またはその塩も提供する。

なお、「本発明のタンパク質と実質的に同一の機能を有する」とは、本発明のタンパク質が有する分子機能などと同種の分子機能などを有することを意味する。ここで、そのような分子機能としては、相互作用分子に対する結合活性、増殖抑制活性等が挙げられる。

#### 【0013】

##### (タンパク質の配列)

本発明のタンパク質の配列決定に関しては、i) 公知のタンパク質配列情報に基づき、対象とする機能を有するドメイン領域を推定した後、ii) その推定ドメイン領域のアミノ酸配列を基本パターンとするドメイン候補配列パターンを用意し、iii) 各配列パターン毎にタンパク質発現を行い、得られたドメインを形成するタンパク質の構造安定性評価により、良好な結果を示すものを目的ドメインとし、この目的ドメインのアミノ酸配列により各タンパク質を定義する。即ち、本発明のタンパク質は、全長タンパク質中のある一部分（目的とする機能を有する）を断片化してドメインを形成するタンパク質として発現させた時に、安定な構造を有するものを経験的に選別したものであり、ドメイン領域予測の段階では数100のオーダーで存在するドメイン候補が、種々の要因により絞り込まれて実際は10～数10のオーダーまで厳選される。従って、このように選別されたタンパク質を、立体構造解析に用いることにより、高精度で且つ信頼性に優れた構造解析を行うことが可能となる。

#### 【0014】

##### (ドメイン領域の推定)

全長タンパク質中のドメイン領域を推定する手法としては、バイオインフォマティクスなどの情報科学的な手法や計算科学的な手法（特願2001-309434号明細書参照）、deleted DNAライブラリーとGFPの組み合わせ（特願2001-062703号

明細書参照)、プロテアーゼによる限定分解などの実験的な手法等、いずれも利用可能であり、特に限定されるものではなく、より精度の高い手法を用いることにより、ドメイン候補群から目的ドメインを選び出す作業効率が向上する。

#### 【0015】

(ドメイン候補配列パターンの作製)

上記ドメイン候補配列パターンは、上述のように推定されたドメイン領域を基準にしてドメイン境界の位置をN末端側又はC末端側に伸ばしたり縮めたりすることにより作製される。

例えば、推定ドメイン領域のN末端側のドメイン境界におけるアミノ酸残基の位置より、N末端側に数から数十残基分伸長させた、又はC末端側に数から数十残基分短縮したおよそ数十種類の境界を新たに設け、それらの境界をN末端とするドメイン候補配列パターンが用意される。同様に、推定ドメイン領域のC末端側のドメイン境界においても数種類のドメイン境界を選定し、各境界をC末端とするドメイン候補配列パターンが作製される。

#### 【0016】

(ドメイン境界の伸縮)

上記推定ドメイン領域のドメイン境界を伸縮させる方法としては、例えば上記ドメイン候補配列パターンに対応したcDNAを作成できるPCRプライマーを個々に合成して、PCRにより作成する方法が挙げられ、特に特願2001-201356号公報に示される2段階PCR法が好適である。

#### 【0017】

(ドメイン候補配列パターンからの目的ドメインの抽出)

かかるドメイン候補配列パターンから実際に安定な立体構造を有する目的ドメインを選び出すためには、まず上述のようにして作製されたドメイン候補配列パターンのcDNAを用いてそれぞれタンパク合成を行う。

このドメイン候補配列パターンの発現系としては、特に限定されず、従来より公知の発現系がいずれも使用可能である。

次に、得られたタンパク質が実際に安定な立体構造をとっているかどうかを判定し、立体構造を有することが確認できたものを本発明におけるタンパク質とし

て採用する。

#### 【0018】

このタンパク質の立体構造の安定性の指標としては、例えば合成されたドメインタンパク質が可溶性タンパク質としてSDSゲル電気泳動等により検出され、かつ適当な分子量相当な均一なバンドとして検出されるかという生化学的指標や、C末端側に融合させたGFPの蛍光強度、NMRスペクトル、CDスペクトルなどの分光学的手法等が挙げられる。

従来のタンパク質の配列決定の過程では、例えば①上記タンパク質合成で、目的とするドメインを形成するタンパク質が発現しない、或いは②発現はしたものの、凝集を起こす、溶解度が低い等の問題があった。本発明者らはこのような問題点を克服し本発明を完成させるに至った。

#### 【0019】

(安定な立体構造を有することの確認)

上記NMRスペクトルにおいてドメインを形成するタンパク質のフォールディングの判定を以下に示す。

$^1\text{D}$ スペクトルにおいて、ドメインを形成するタンパク質がフォールドしていない場合はVal、Leu、Ileなどのメチル基プロトンに由来するシグナルが0.8ppm付近に観測される。しかしフォールドしている場合はメチル基プロトンの環境が変化し、シグナルが高磁場側(0.7ppmから-0.5ppm付近)にシフトする。

$^1\text{H}$ - $^{15}\text{N}$  HSQCにける判定は、クロスピーク収束度合いとシグナル強度の均一性の評価を目視により行うことが挙げられる。すなわち、クロスピークが密集した場合は、立体構造を形成していない状態とし、逆に分散した場合は安定な立体構造を形成している状態として立体構造の安定性の評価を行う。

#### 【0020】

(発現系)

本発明のタンパク質は、本発明の発現系を含む一般的な宿主細胞などから公知の手段を用いて製造することができる。このような発現系としては、本発明のポリヌクレオチドを含む発現系や、その発現系を含み公知の手段により製造された宿主細胞、遺伝子組換え技術を用いて本発明のタンパク質を製造し得る発現系、

本発明のタンパク質を製造し得る無細胞タンパク質合成系などが挙げられる。

#### 【0021】

(ベクター)

本発明の(組換え)ベクターは、適当なベクターに本発明の遺伝子を連結(挿入)することにより得ることができる。本発明の遺伝子を挿入するためのベクターは、宿主中で複製可能なものであれば特に限定されず、例えば、プラスミド DNA、ファージ DNA等が挙げられる。

プラスミド DNAとしては、大腸菌由来のプラスミド(例えばpRSET、pBR322、pBR325、pUC118、pUC119、pUC18、pUC19等)、枯草菌由来のプラスミド(例えばpUB110、pTP5等)、酵母由来のプラスミド(例えばYEpl3、YEpl24、YCp50等)などが挙げられ、ファージDNAとしてはλファージ(Charon4A、Charon21A、EMBL3、EMBL4、λgt10、λgt11、λZAP等)が挙げられる。さらに、レトロウイルス又はワクシニアウイルスなどの動物ウイルス、バキュロウイルスなどの昆虫ウイルスベクターを用いることもできる。

ベクターに本発明の遺伝子を挿入するには、まず、精製されたDNAを適当な制限酵素で切断し、適当なベクター DNAの制限酵素部位又はマルチクローニングサイトに挿入してベクターに連結する方法などが採用される。

本発明の遺伝子は、その遺伝子の機能が発揮されるようにベクターに組み込まれることが必要である。そこで、本発明のベクターには、プロモーター、本発明の遺伝子のほか、所望によりエンハンサーなどのシスエレメント、スプライシングシグナル、ポリA付加シグナル、選択マーカー、リボソーム結合配列(SD配列)などを含有するものを連結することができる。なお、選択マーカーとしては、例えばジヒドロ葉酸還元酵素遺伝子、アンピシリン耐性遺伝子、ネオマイシン耐性遺伝子等が挙げられる。

#### 【0022】

(形質転換体)

本発明の形質転換体は、本発明の組換えベクターを、目的遺伝子が発現し得るように宿主中に導入することにより得ることができる。ここで、宿主としては、本発明のDNAを発現できるものであれば特に限定されるものではない。例えば、



エッシェリヒア・コリ (*Escherichia coli*) 等のエッシェリヒア属、バチルス・ズブチリス (*Bacillus subtilis*) 等のバチルス属、シュードモナス・プチダ (*Pseudomonas putida*) 等のシュードモナス属、リゾビウム・メリロティ (*Rhizobium meliloti*) 等のリゾビウム属に属する細菌が挙げられる。また、サッカロミセス・セレビシエ (*Saccharomyces cerevisiae*)、シゾサッカロミセス・ポンベ (*Schizosaccharomyces pombe*) 等の酵母、さらに COS 細胞、CHO 細胞等の動物細胞が挙げられる。あるいは Sf9、Sf21 等の昆虫細胞を用いることもできる。

#### 【0023】

大腸菌等の細菌を宿主とする場合は、本発明の組換えベクターが該細菌中で自律複製可能であると同時に、プロモーター、リボゾーム結合配列、本発明の遺伝子、転写終結配列により構成されていることが好ましい。また、プロモーターを制御する遺伝子が含まれていてもよい。

#### 【0024】

大腸菌としては、例えばエッシェリヒア・コリ (*Escherichia coli*) K12、DH1 などが挙げられ、枯草菌としては、例えばバチルス・ズブチリス (*Bacillus subtilis*) などが挙げられる。プロモーターとしては、大腸菌等の宿主中で発現できるものであればいずれを用いてもよい。例えば trp プロモーター、lac プロモーター、P<sub>L</sub> プロモーター、P<sub>R</sub> プロモーターなどの、大腸菌やファージに由来するプロモーターが用いられる。tac プロモーターなどのように、人為的に設計改変されたプロモーターを用いてもよい。細菌への組換えベクターの導入方法としては、細菌に DNA を導入する方法であれば特に限定されるものではない。例えばカルシウムイオンを用いる方法 (Cohen, S.N. et al. (1972) Proc. Natl. Acad. Sci., U.S.A. 69, 2110-2114)、エレクトロポレーション法等が挙げられる。

#### 【0025】

酵母を宿主とする場合は、例えばサッカロミセス・セレビシエ (*Saccharomyces cerevisiae*)、シゾサッカロミセス・ポンベ (*Schizosaccharomyces pombe*)、ピヒア・パストリス (*Pichia pastoris*) などが用いられる。この場合、プロモーターとしては酵母中で発現できるものであれば特に限定されず、例えば gal1 プロモーター、gal10 プロモーター、ヒートショックタンパク質プロモーター、MF $\alpha$ 1 プロ

モーター、PH05プロモーター、PGKプロモーター、GAPプロモーター、ADHプロモーター、AOX1プロモーター等が挙げられる。酵母への組換えベクターの導入方法としては、酵母にDNAを導入する方法であれば特に限定されず、例えばエレクトロポレーション法(Becker, D.M. et al. (1990) Methods. Enzymol., 194,182-187)、スフェロプラスト法(Hinnen, A. et al. (1978) Proc. Natl. Acad. Sci., USA 75, 1929-1933)、酢酸リチウム法(Itoh, H. (1983) J. Bacteriol. 153,163-168)等が挙げられる。

動物細胞を宿主とする場合は、サル細胞COS-7、Vero、チャイニーズハムスター卵巣細胞(CHO細胞)、マウスL細胞、ラットGH3、ヒトFL細胞などが用いられる。プロモーターとしてSR $\alpha$ プロモーター、SV40プロモーター、LTRプロモーター、CMVプロモーター等が用いられ、また、ヒトサイトメガロウイルスの初期遺伝子プロモーター等を用いてもよい。動物細胞への組換えベクターの導入方法としては、例えばエレクトロポレーション法、リン酸カルシウム法、リポフェクション法等が挙げられる。

#### 【0026】

昆虫細胞を宿主とする場合は、Sf9細胞、Sf21細胞などが用いられる。昆虫細胞への組換えベクターの導入方法としては、例えばリン酸カルシウム法、リポフェクション法、エレクトロポレーション法などが用いられる。

#### 【0027】

(抗体)

本発明のタンパク質を抗原として用いて、その抗原に対する抗体を調製することができる。

#### 【0028】

[本発明のタンパク質に対するポリクローナル抗体の作製]

前記の抗原を用いて動物を免疫する。抗原の動物1匹当たりの投与量は、ウサギの場合、例えばアジュバントを用いて100~500 $\mu$ gである。アジュバントとしては、フロイント完全アジュバント(FCA)、フロイント不完全アジュバント(FIA)、水酸化アルミニウムアジュバント等が挙げられる。

#### 【0029】

免疫は、哺乳動物（例えばラット、マウス、ウサギなどの非ヒト哺乳動物）に投与することにより行われる。投与部位は静脈内、皮下又は腹腔内である。また、免疫の間隔は特に限定されず、数日から数週間間隔、好ましくは2～3週間間隔で、1～10回、好ましくは2～3回免疫を行う。そして、最終の免疫日から6～60日後に抗体価を測定し、最大の抗体価を示した日に採血し、抗血清を得る。抗体価の測定は、酵素免疫測定法(ELISA; enzyme-linked immunosorbent assay)、放射性免疫測定法(RIA; radioimmuno assay)等により行うことができる。

抗血清から抗体の精製が必要とされる場合は、硫酸塩析法、イオン交換クロマトグラフィー、ゲル濾過、アフィニティークロマトグラフィーなどの公知の方法を適宜選択して、又はこれらを組み合わせることにより精製することができる。

#### 【0030】

[タンパク質に対するモノクローナル抗体の作製]

上記抗原を用いて動物を免疫する。必要であれば、免疫を効果的に行うため、前記と同様アジュバント（市販のフロイント完全アジュバント、フロイント不完全アジュバント等）を混合してもよい。

#### 【0031】

免疫は、哺乳動物（例えばラット、マウス、ウサギなど）に投与することにより行われる。抗原の1回の投与量は、マウスの場合1匹当たり50 $\mu$ gである。投与部位は、主として静脈内、皮下、腹腔内である。また、免疫の間隔は特に限定されず、数日から数週間間隔、好ましくは2～3週間間隔で、最低2～3回行う。そして、最終免疫後、抗体産生細胞を採集する。抗体産生細胞としては、脾臓細胞、リンパ節細胞、末梢血細胞等が挙げられるが、脾臓細胞が好ましい。

#### 【0032】

[細胞融合]

ハイブリドーマを得るため、抗体産生細胞とミエローマ細胞との細胞融合を行う。抗体産生細胞と融合させるミエローマ細胞として、マウスなどの動物由来の細胞であって一般に入手可能な株化細胞を使用することができる。使用する細胞株として、薬剤選択性を有し、未融合の状態ではHAT選択培地（ヒポキサンチン、アミノプテリン及びチミジンを含む）で生存できず、抗体産生細胞と融合した

状態でのみ生存できる性質を有するものが好ましい。例えば、ミエローマ細胞の具体例としてはP3X63-Ag.8.U1 (P3U1)、P3/NSI/1-Ag4-1、Sp2/0-Ag14などのマウスミエローマ細胞株が挙げられる。

次に、上記ミエローマ細胞と抗体産生細胞とを細胞融合させる。細胞融合は、血清を含まないDMEM、RPMI-1640培地などの動物細胞培養用培地中に、抗体産生細胞とミエローマ細胞とを15:1～25:1の割合で混合し、ポリエチレングリコール等の細胞融合促進剤存在のもとで、あるいは電気パルス処理(例えばエレクトロポレーション)により融合反応を行う。

### 【0033】

#### [ハイブリドーマの選別及びクローニング]

細胞融合処理後の細胞から目的とするハイブリドーマを選別する。例えば、ヒポキサンチン、アミノプテリン及びチミジンを含む培地を用いて培養し、生育する細胞をハイブリドーマとして得ることができる。

次に、増殖したハイブリドーマの培養上清中に、目的とする抗体が存在するかどうかをスクリーニングする。ハイブリドーマのスクリーニングは、通常の方法に従えばよく、特に限定されるものではない。例えば、ハイブリドーマとして生育したウェルに含まれる培養上清の一部を採集し、酵素免疫測定法(ELISA; enzyme-linked immunosorbent assay)、RIA (radioimmuno assay)等によってスクリーニングすることができる。融合細胞のクローニングは、限界希釈法等により行い、最終的に単クローン抗体産生細胞であるハイブリドーマを樹立する。

### 【0034】

#### [モノクローナル抗体の採取]

樹立したハイブリドーマからモノクローナル抗体を採取する方法として、通常の細胞培養法等を採用することができる。細胞培養法においては、ハイブリドーマを10%牛胎児血清含有 RPMI-1640培地又はMEM 培地等の動物細胞培養培地中、通常の培養条件(例えば37℃, 5% CO<sub>2</sub>濃度)で3～10日間培養し、その培養上清から抗体を取得する。

上記抗体の採取方法において、抗体の精製が必要とされる場合は、硫酸分画法、イオン交換クロマトグラフィー、アフィニティークロマトグラフィー、ゲルク

ロマトグラフィーなどの公知の方法を適宜に選択して、又はこれらの方法を組み合わせることにより精製することができる。

#### 【0035】

(本発明のタンパク質の製造)

本発明のタンパク質は、例えば、形質転換体を培養し、その培養物から採取することにより得ることができる。「培養物」とは、培養上清のほか、培養細胞若しくは培養菌体又は細胞若しくは菌体の破碎物のいずれをも意味するものである。「本発明の形質転換体を培養する方法」は、宿主の培養に適用される通常の方法に従って行われる。

#### 【0036】

大腸菌や酵母菌等の微生物を宿主として得られた形質転換体を培養する培地としては、微生物が資化し得る炭素源、窒素源、無機塩類等を含有し、形質転換体の培養を効率的に行うことができる培地であれば、天然培地、合成培地のいずれを用いてもよい。炭素源としては、グルコース、フラクトース、スクロース、デンプン等の炭水化物、酢酸、プロピオン酸等の有機酸、エタノール、プロパノール等のアルコール類が用いられる。窒素源としては、アンモニア、塩化アンモニウム、硫酸アンモニウム、酢酸アンモニウム、リン酸アンモニウム等の無機酸若しくは有機酸のアンモニウム塩又はその他の含窒素化合物のほか、ペプトン、肉エキス、コーンステープリカー等が用いられる。無機物としては、リン酸第一カリウム、リン酸第二カリウム、リン酸マグネシウム、硫酸マグネシウム、塩化ナトリウム、硫酸第一鉄、硫酸マンガン、硫酸銅、炭酸カルシウム等が用いられる。

#### 【0037】

培養は、好ましくは、振盪培養又は通気攪拌培養などの好氣的条件下、37℃で6～24時間行う。培養期間中、pHは7.0～7.5に保持する。pHの調整は、好ましくは無機又は有機酸、アルカリ溶液等を用いて行う。培養中は必要に応じてアンピシリンやテトラサイクリン等の抗生物質を培地に添加してもよい。

#### 【0038】

プロモーターとして誘導性のプロモーターを用いた発現ベクターで形質転換し

た微生物を培養する場合は、必要に応じてインデューサーを培地に添加してもよい。例えば、Lacプロモーターを用いた発現ベクターで形質転換した微生物を培養するときにはイソプロピル- $\beta$ -D-チオガラクトピラノシド(IPTG)等を、trpプロモーターを用いた発現ベクターで形質転換した微生物を培養するときにはインドールアクリル酸(IAA)等を培地に添加してもよい。

#### 【0039】

動物細胞を宿主として得られた形質転換体を培養する培地としては、一般に使用されているRPMI1640培地、DMEM培地又はこれらの培地に牛胎児血清等を添加した培地等が用いられる。培養は、通常、5%CO<sub>2</sub>存在下、37℃で1~30日行う。培養中は必要に応じてカナマイシン、ペニシリン等の抗生物質を培地に添加してもよい。

#### 【0040】

培養後、タンパク質が菌体内又は細胞内に生産される場合には、菌体又は細胞を破碎することによりタンパク質を抽出する。また、本発明のタンパク質が菌体外又は細胞外に生産される場合には、培養液をそのまま使用するか、遠心分離等により菌体又は細胞を除去する。その後、タンパク質の単離精製に用いられる一般的な生化学的方法、例えば硫酸アンモニウム沈殿、ゲルクロマトグラフィー、イオン交換クロマトグラフィー、アフィニティークロマトグラフィー等を単独で又は適宜組み合わせるにより、前記培養物中から本発明のタンパク質を単離精製することができる。この精製工程の間又は後において、プロテアーゼ処理により精製のために用いられたタグ配列を除去することができる。

#### 【0041】

(無細胞タンパク質合成系を用いるドメインを形成するタンパク質の製造方法)

本発明は、無細胞タンパク質合成系を用いる、配列番号1、3、5、7、9のいずれか一つに記載のアミノ酸配列を有するドメインを形成するタンパク質、および配列番号7に記載されたアミノ酸配列のN末端から0個~10個のアミノ酸残基が欠損し、更にC末端から0個~5個のアミノ酸残基が欠損したアミノ酸配列を有し、アミノ酸残基数が92~106であるタンパク質の製造方法も提供す

る。

無細胞タンパク質合成系は、細胞抽出液を用いて試験管内でタンパク質を合成する系である。「無細胞タンパク質合成系」は、mRNAの情報を読み取ってリボソーム上でタンパク質を合成する無細胞翻訳系、及びDNAを鋳型としてRNAを合成する無細胞転写系と無細胞翻訳系の両者を含む。無細胞タンパク質合成系は、系を容易に改変することができるため、目的のタンパク質に適した発現系を構築しやすいという利点がある。なお、無細胞タンパク質合成系の詳細については、特許公開2000-175695号などに記載されている。

#### 【0042】

##### [細胞抽出液]

粗細胞抽出液は、細菌（例えば大腸菌等）、菌類（例えば出芽酵母等）、小麦胚芽、ウサギ網赤血球、マウスL細胞、エールリッヒ腹水癌細胞、HeLa細胞、CHO細胞等の、高いタンパク質合成活性の状態の真核および原核生物細胞からの抽出液であってもよい（Clemens, M. J., *Transcription and translation—a practical approach*, (1984), pp. 231-270, Henes, B. D. とHiggins, S. J. 編, IRL Press, Oxford)。

粗細胞抽出液はリボソーム、tRNAなどのタンパク質合成に必要な成分を含むことが好ましい。粗抽出液の調製は、例えばPratt, J. M. ら, *Transcription and translation—a practical approach*, (1984), pp. 179-209, Henes, B. D. とHiggins, S. J. 編, IRL Press, Oxfordに記載の方法を使用できる。具体的には、フレンチプレスによる破碎（Prattら, 上掲）やガラスビーズを用いた破碎によって行うことができる。好ましい細胞抽出液は大腸菌S30細胞抽出液である。S30細胞抽出液は、大腸菌BL21 Codon Plus株から既知の方法、例えばPrattら（上掲）の方法に従って調製できるし、あるいはPromega社やNovagen社から市販されるものを使用してもよい。細胞抽出液としては、主に大腸菌、小麦胚、ウサギ網赤血球由来のものが使用される。

## 【0043】

## [透析装置]

透析膜を介して内液と外液とを隔離して含む振とうもしくは攪拌可能な透析装置を用いることができる。小スケール反应用装置としては、例えば *Dispo Dialyzer* (登録商標) (*Spectrum* 社製) や *Slidealyzer* (登録商標) (*Pierce* 社製) が挙げられる。

また、大スケール反应用装置としては、*Spectra/Por* (登録商標) 透析用チューブ (*Spectrum* 社製) を例示できる。

## 【0044】

## [透析内液]

無細胞タンパク質合成系における透析内液 (すなわち、タンパク質合成反応液) には、大腸菌 S30 等の濃縮細胞抽出液の他に、目的のタンパク質をコードする DNA もしくは RNA (mRNA 等)、ATP (アデノシン 5'-三リン酸)、GTP (グアノシン 5'-三リン酸)、CTP (シチジン 5'-三リン酸)、UTP (ウリジン 5'-三リン酸)、緩衝液、塩類、アミノ酸、RNアーゼ阻害剤、抗菌剤、必要により RNA ポリメラーゼ (DNA を鋳型として用いる場合) および tRNA、などを含んでもよい。

その他、ATP 再生系としてホスホエノールピルベートとピルビン酸キナーゼの組み合わせまたはクレアチンホスフェートとクレアチンキナーゼの組み合わせ、ポリエチレングリコール (例えば #8000)、3', 5'-cAMP、葉酸類、RNアーゼ阻害剤、還元剤 (例えばジチオトレイトール)、などを含むことができる。一方、透析外液 (すなわち、タンパク質合成基質溶液) は、透析内液組成から細胞抽出液、RNアーゼ阻害剤、DNA もしくは RNA、RNA ポリメラーゼを除いたものが使用できる。例えば、緩衝液、ATP、GTP、CTP、UTP、塩類、アミノ酸、抗菌剤などを含むことができる。添加成分の濃度は任意に選択することができる。

## 【0045】

## [緩衝液]

緩衝液としては、例えば *Hepes-KOH*、*Tris-OAc* のような緩



衝剤を使用できる。塩類の例は、酢酸塩（例えばアンモニウム塩、マグネシウム塩など）、グルタミン酸塩などであり、抗菌剤の例はアジ化ナトリウム、アムピシリンなどである。アミノ酸はタンパク質を構成する20種のアミノ酸である。また、DNAを鋳型として用いる場合にはRNAポリメラーゼを反応系に添加するが、例えばT7 RNAポリメラーゼなどの市販の酵素を使用できる。

#### 【0046】

透析膜の内部に上記透析内液を、一方その外部に透析外液を入れた、膜の分子量限界に応じて物質が膜を介して移動可能とする閉鎖系を振とうまたは攪拌（回転攪拌など）し、生成した目的タンパク質を、透析内液または外液から回収することができる。温度および攪拌速度などの反応条件は、タンパク質の種類に応じて任意の条件を使用できる。タンパク質の合成の場合、温度は通常約25～約50℃、好ましくは37℃であるが、高度好熱菌由来の菌体抽出液を用いる無細胞タンパク質合成系では50℃を超える温度でもよい。

また、振とう速度もしくは攪拌速度は低速、例えば100～200rpmを使用できる。目的のタンパク質の生成を監視しながら、反応時間を適当に選択することができる。

#### 【0047】

上記無細胞タンパク質合成系の透析外液を、反応速度が低下した時点で新鮮なものと交換することが好ましい。また、透析膜の分子量限界が10000ダルトンを超えるもの、好ましくは約50000ダルトンおよびそれ以上のものを使用する場合には、タンパク質の生産量をさらに高めることができる。

#### 【0048】

##### [タンパク質の精製]

生成タンパク質の精製は、生細胞からの分離と比べて混在する汚染物質の量および種類が格段に少ないため、比較的容易に行うことができる。精製法は、タンパク質の性質に応じて従来公知のものを単独にまたは適宜組合わせて使用できる。例えば硫酸アンモニウムもしくはアセトン沈殿、酸抽出、アニオンもしくはカチオン交換クロマトグラフィー、疎水性相互作用クロマトグラフィー

、アフィニティークロマトグラフィー、ゲルろ過クロマトグラフィー、HPLC、電気泳動、クロマトフォーカシングなどの慣用の技術を挙げることができる。この精製工程の間又は後においてプロテアーゼ処理により、精製のために用いられたタグ配列を除去することができる。生成タンパク質の同定および定量は、活性測定、免疫学的測定、分光学的測定、アミノ酸分析などによって、必要に応じて標準サンプルと比較しながら行うことができる。

#### 【0049】

(スクリーニング方法)

本発明のスクリーニング方法としては、本発明のタンパク質またはその塩と候補物質とを接触させる工程と、前記タンパク質と候補物質とが相互作用をするかどうかを確認する工程とを含む前記タンパク質と相互作用を有する化合物のスクリーニング方法が挙げられる。ここで、「相互作用を有する」とは、化合物とタンパク質が結合して、そのタンパク質の分子機能及び／又は生理活性を抑制または増強すること、などをいう。このスクリーニング方法においては、そのタンパク質と候補物質を接触させて、そのタンパク質の分子機能または生理活性が変化するかどうかを測定する。

#### 【0050】

[NMRを用いた相互作用物質探索]

相互作用物質探索にNMRを用いる場合、候補物質の添加前後でのタンパク質のシグナル変化の有無により、相互作用の有無を判定することができる。すなわち、相互作用候補物質がタンパク質と相互作用する場合には、タンパク質の相互作用部位近傍に由来するNMRシグナルの化学シフト値、線幅、個数等に変化が起きることが期待されるので、その変化を検出することで相互作用の有無を判定できる。特に<sup>15</sup>Nで標識したタンパク質は調製が比較的容易であり、そこから得られる<sup>15</sup>N-HSQCスペクトルは、分解能や感度が比較的高く、添加した相互作用候補物質由来のNMRシグナルの影響を受けにくいいため、その有用性は高い。

#### 【0051】

(定量方法)

本発明のタンパク質は、例えば本発明の抗体を用いることによっても定量する

ことができる。抗体を用いたタンパク質の定量方法としては、例えば、サンドイッチ免疫測定法、競合法、イムノメトリック法、ネフメトリー法などが挙げられる。また、放射性同位体や酵素、蛍光物質などの標識物質を用いて検出することもできる。

#### 【0052】

(定量方法を用いたスクリーニング方法)

本発明の抗体は、本発明のタンパク質と特異的に結合するため、本発明の抗体を用いることで、本発明のタンパク質と相互作用する化合物のスクリーニングなどに用いることができる。この際のスクリーニング方法としては、公知のスクリーニング方法を用いることができる。

#### 【0053】

なお、本発明の抗体を用いた、本発明のタンパク質の定量方法によれば、本発明のタンパク質が関与する疾患の予防・診断を行うことができる。

#### 【0054】

(立体構造解析)

タンパク質の立体構造は、NMRによる構造解析、X線構造解析などによって解析することができる。

#### 【0055】

(NMR)

NMRに用いる試料としては、特に限定されるわけではないが、好ましくは、タンパク質中の $^{12}\text{C}$ 、または $^{14}\text{N}$ を $^{13}\text{C}$ 、 $^{15}\text{N}$ 核で安定同位体標識した試料を用いる(多核多次元NMR測定)。タンパク質を安定同位体標識する技術は慣用技術であり、例えば、Cl o r e, G. M. & G r o n e n b o r n, A. M., Science, 252, p. 1390-1399, 1991等の文献に記載されている。特に、主鎖 $^{15}\text{N}$ 均一安定同位体標識したタンパク質試料を用いた解析が容易であり好ましい。また、タンパク質の主鎖の骨格を、 $^{13}\text{C}$ 、 $^{15}\text{N}$ 及び $^2\text{H}$ のうち少なくとも2種類以上の同位体標識したものを使用してもよい(特表2001-514239)。

#### 【0056】

好ましくは、IPAP-HSQCスペクトルの観測等による $^{15}\text{N}$ - $^1\text{H}$ スピン結合定数の測定を行う。「IPAP-HSQCスペクトル」とは、準位相、反位相の2つのHSQCスペクトルを同時に観測し、両者のスペクトルの足しあわせをすることにより、シグナルのオーバーラップを防いで、効果的に $^{15}\text{N}$ - $^1\text{H}$ スピン結合定数を読みとるための測定法である。

#### 【0057】

2種類以上のNMR法により化学シフト帰属が行われる。例えば、2次元NMRとしては2D、DOQ-COSY、TOCSY、NOESY、HSQC等、多次元NMRとしては、HNCO、HCACO、HNCA、HCA(CO)N、HN(CO)CA、HNHB、CBCANH、H(CA)NH、HBHA(CO)NH、HCCH-COSY、HCANH、HCCH-TOCSY、HCACON、 $^{15}\text{N}$ -NOESY-HSQC、 $^{13}\text{C}$ -NOESY-HSQC等が公知技術として知られている。NMRの一般的手法は周知であり、例えば、「タンパク質のNMR」(共立出版、1996、荒田洋治)；「日本生化学会編 基礎生化学実験法 第3巻 タンパク質I. 検出・構造解析法」第18章NMRによる立体構造解析(東京化学同人、2001年2月)；伊藤隆ら、日本農業学会誌21, p. 450-459、1996；田中俊之、化学と工業 第49巻 第2号 p. 155-158、1996等に詳述されている。

#### 【0058】

立体構造解析にNMRを用いる場合、タンパク質の各プロトン間の核オーバーハウザー効果の大きさから各プロトン間の距離を見積もり、その距離情報に基づき立体構造を決定する方法が一般的である。化学シフト値、スカラーカップリング値、残余双極子カップリング値、水素結合等の情報を加えて立体構造を精密化することも可能である。

#### 【0059】

NMRデータから構造解析を行うための多くのプログラムが周知である。好ましくは、化学シフト帰属のためのものとして、NMR Pipe、PIPP、Capp、Felix、NMR View、XEASY、立体構造計算ソフトとしてX-PLOR、CNS、DYANA、DYNAMO等を用いて構造解析を行う。

## 【0060】

(X線結晶構造解析)

立体構造解析にX線結晶構造解析を用いる場合、結晶化させたタンパク質のX線回折像に基づき電子密度図を計算し、立体構造を決定する。すなわち、タンパク質を結晶化し、その結晶に単色化されたX線をあて、得られたX線の回折像をもとに、該蛋白質の3次元構造を明らかにしていくものである (Blundell, T. L. 及び Johnson, L. N., PROTEIN CRYSTALLOGRAPHY, 1-565頁, (1976) Academic Press, New York)。

## 【0061】

(立体構造情報に基づくスクリーニング方法)

次に、本発明は、前記タンパク質の立体構造に関する情報を用いて、前記タンパク質の活性部位を決定する工程と、当該活性部位と相互作用する化合物をコンピュータ上で検索する工程とを含む、前記タンパク質またはその塩と相互作用する化合物のスクリーニング方法をも提供する。

## 【0062】

(インシリコ スクリーニング)

分子の3次元構造に基づく薬物設計については、医薬品の開発・第7巻「分子設計」(廣川書店)をはじめとして数多くの総説がある。具体的には、第一にFlexiDock、FlexX等のフレキシブルリガンドバインディングシミュレーションソフトウェアを用いて、Oracle等のリレーショナルデータベースに格納された低分子(分子量1000以下)化合物のライブラリー(たとえば約150000種)をコンピュータでスクリーニングする。このライブラリー内の化学物質はCONCORD等のプログラムで3次元構造を指定し、活性部位にはめ込める物質を選択することができる。選ばれた物質の中からInsight IIやMOE等のシミュレーションプログラムを用いて肉眼により更によく活性部位にあてはまる化合物を絞り込む。一連の過程で利用されるコンピュータソフトウェアは、いずれも以下のような市販のものである。

## 【0063】

FlexiDock: Tripos Inc. FlexX: Tripos Inc. CONCORD: Tripos Inc. Oracle: Oracle Corp. Insight II: Molecular Simulations Inc. MOE: Chemical Computing Group Inc.

他の方法は、未知の物質を含めた候補化合物のコンピュータによる設計である。この方法には、メチル、エチル等の化学基を活性部位に並べて適合するものを探す方法と、原子を活性部位にコンピュータプログラムを用いて並べていく方法とが知られている。

#### 【0064】

(ウェットスクリーニング)

本発明のタンパク質と相互作用する候補化合物の有力候補を選択するために、インシリコスクリーニングにより得られた候補化合物と本発明のタンパク質と接触させ、本発明のタンパク質の分子機能又は生理活性を測定する。候補化合物と本発明のタンパク質の立体構造データをもとに候補化合物を修飾し、より望ましい構造とする。

#### 【0065】

絞り込まれた化合物を合成し、実際に前記タンパク質と作用させ、スクリーニングする。前記タンパク質の活性を変化させた化合物を、更に動物実験によってインビトロでの活性や、体内動態、あるいは毒性等に関する試験を行う。

#### 【0066】

(相互作用する物質を含む医薬)

本発明のタンパク質と相互作用を有する物質は、そのタンパク質が関与する疾患の予防及び／又は治療剤として用いることができる。そのような医薬は、経口又は非経口的に全身又は局所投与することができる。

#### 【0067】

本発明の医薬を経口投与する場合は、錠剤、カプセル剤、顆粒剤、散剤、丸剤、トローチ剤、内用水剤、懸濁剤、乳剤、シロップ剤等のいずれのものであってもよく、使用する際に再溶解させる乾燥生成物にしてもよい。また、本発明の医薬を非経口投与する場合は、静脈内注射（点滴を含む）、筋肉内注射、腹腔内注射、皮下注射、坐剤などの製剤形態を選択することができ、注射用製剤の場合は

単位投与量アンプル又は多投与量容器の状態を提供される。

これらの各種製剤は、製剤上通常用いられる賦形剤、増量剤、結合剤、湿潤剤、崩壊剤、潤滑剤、界面活性剤、分散剤、緩衝剤、保存剤、溶解補助剤、防腐剤、矯味矯臭剤、無痛化剤、安定化剤、等張化剤などを適宜選択し、常法により製造することができる。

#### 【0068】

上記各種製剤は、医薬的に許容される担体又は添加物を共に含むものであってもよい。このような担体及び添加物の例として、水、医薬的に許容される有機溶剤、コラーゲン、ポリビニルアルコール、ポリビニルピロリドン、カルボキシビニルポリマー、アルギン酸ナトリウム、水溶性デキストラン、カルボキシメチルスターチナトリウム、ペクチン、キサントガム、アラビアゴム、カゼイン、ゼラチン、寒天、グリセリン、プロピレングリコール、ポリエチレングリコール、ワセリン、パラフィン、ステアシルアルコール、ステアリン酸、ヒト血清アルブミン、マンニトール、ソルビトール、ラクトースなどが挙げられる。使用される添加物は、本発明の剤型に応じて上記の中から適宜又は組み合わせて選択される。

#### 【0069】

本発明の医薬の投与量は、投与対象の年齢、投与経路、投与回数により異なり、広範囲に変えることができる。この場合、本発明のタンパク質の有効量と適切な希釈剤及び薬理学的に使用し得る担体との組合せとして投与される有効量は、一回につき体重1kgあたり0.01mg～1000 mgの範囲の投与量を選ぶことができ、好ましくは1日1回から数回に分けて1日以上投与される。

#### 【0070】

(配列の説明)

本明細書の配列番号は、以下の配列を示す。

[配列番号1]

Cap-Gly様ドメインタンパク質 (KIAA0849 タンパク質(464-554))のアミノ酸配列を示す。

[配列番号2]

配列番号 1 のタンパク質をコードする DNA 配列を示す。

[配列番号 3]

Cap-Gly様ドメインタンパク質 (KIAA0849 タンパク質(414-558))の amino 酸配列を示す。

[配列番号 4]

配列番号 3 のタンパク質をコードする DNA 配列を示す。

[配列番号 5]

Cap-Gly様ドメインタンパク質 (KIAA0849 タンパク質 (454-554))の amino 酸配列を示す。

[配列番号 6]

配列番号 5 のタンパク質をコードする DNA 配列を示す。

[配列番号 7]

Cap-Gly様ドメインタンパク質 (KIAA0849 タンパク質(454-559)) の amino 酸配列 (配列番号 1 に示される amino 酸配列の N 末端と C 末端にそれぞれ amino 酸残基 NTAPVQESPP、VSNQI が付加した amino 酸配列) を示す。

[配列番号 8]

配列番号 7 のタンパク質をコードする DNA 配列を示す。

[配列番号 9]

Cap-Gly様ドメインタンパク質 (KIAA0849 タンパク質(464-559))の amino 酸配列を示す。

[配列番号 10]

配列番号 9 のタンパク質をコードする DNA 配列を示す。

[配列番号 11]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 12]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 13]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 14]



以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 15]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 16]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 17]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 18]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 19]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 20]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 21]

以下の実施例で用いられるプライマーの塩基配列を示す。

[配列番号 22]

配列番号 1 に示されるアミノ酸配列の N 末端と C 末端に複数のアミノ酸残基が付加したアミノ酸配列を示す。

【0071】

#### 【実施例】

以下に実施例を示して、本発明をより詳細に説明するが、これらは本発明の範囲を限定するものではない。

##### i) ドメイン領域の推定

ドメイン領域の推定は以下の手順で行った。

まず、1) <SCOP法>問い合わせ配列が、タンパク質データベース SCOP (Version 1.55) に含まれる配列と相同性がある領域が検出された場合、その領域をドメインとして予測した。相同性検出手法は BLASTP を利用し、E-value が 0.1 以下のヒットがあった場合に相同性があったと判断した。

2) <PFAM法>問い合わせ配列が、タンパク質モチーフデータベース PFAM (ve

rsion6.5) に含まれる配列プロファイルと相同性がある領域が検出された場合、その領域をドメインとして予測した。相同性検出手法はHMMERを利用し、E-valueが0.1以下のヒットがあった場合に相同性があったと判断した。

3) <ProDom法>問い合わせ配列が、タンパク質モチーフデータベースProDom (2000年1月にWebより取得したバージョン) に含まれるコンセンサス配列のいずれかに対して相同性がある領域が検出された場合、その領域をドメインとして予測した。相同性検出手法はBLASTPを利用し、E-valueが0.1以下のヒットがあった場合に相同性があったと判断した。

4) <NR法>問い合わせ配列を、タンパク質配列データセット (NCBI-nr) に対してBLASTPによる相同性検索を行い、E-valueが0.1以下のヒットがあった場合、その相同性領域をグループとしてまとめ、ドメインとして予測した。

5) <PASS法>問い合わせ配列を、タンパク質配列データセット (NCBI-nr) に対してBLASTPによる相同性検索を行い、相同性が検出された頻度を計算した。頻度の高い部分を山、低い部分を谷として表示し、谷となっている部分でドメイン境界となるように、一つの山をドメインとして予測した。

6) <No Hit法>以上1) から5) までの方法のいずれを用いてもドメインとして検出されなかった領域 (残余領域) をドメインとして予測した。

7) <差分ドメイン境界設定法>上記6つのドメイン予測について、ヒット領域が重なっている場合の優先順位は1) を最優先として、以下2), 3), 4), 5), 6) の順序とし、ヒット領域が重なっているものの、ドメイン境界のずれが30残基以上あり、かつ低い優先度での定義のほうがある場合はN末側あるいはC末側により長く存在している場合は、その差分の配列を別途ドメインとして予測した。

### 【0072】

以上のいずれかの方法で推定されたドメイン領域のうち、Low-Complexity領域 (複雑性の低い配列領域) を1箇所以上有するものや、全長30残基に未満のものは、除外した。

KIAA0849タンパク質のアミノ酸配列について上述のようにしてドメイン領域の推定を行ったところ、NR法によりアミノ酸残基番号496-539の範囲をドメイン領域と推定した。このドメイン領域は、Low-Complexity領域 (複雑性の低い配列領域)

域)をもたず、全長も30残基以上であるため、最終的に本領域をバイオインフォマティクスによるドメイン推定の結果とした。

このKIAA0849タンパク質中のアミノ酸残基番号496番から539番までのアミノ酸配列を有するタンパク質(ここで、推定ドメインと称する。)について、後述の無細胞タンパク質合成系を用い、タンパク質合成反応を行った。その後、得られた試料について定法に従ってSDSゲル電気泳動を行い、タンパク質の発現状態を調べた。

その結果、推定ドメインのアミノ酸配列情報からは、目的とするタンパク質の発現を行うことができなかった。

そこで、この推定ドメインのアミノ酸配列を基準にして、KIAA0849タンパク質のアミノ酸配列に対し、該推定ドメインのドメイン境界の位置をN末端およびC末端においてそれぞれ数残基ずつ伸ばしたり縮めたりしたコンストラクトを系統的に作成した。

即ち、例えばKIAA0849タンパク質のアミノ酸残基番号496番を基準とし、N末端側に10残基ずつ伸縮させ、またC末端側に10残基ずつ短縮させたパターンと、KIAA0849タンパク質のアミノ酸残基番号539番を基準とし、N末端側に5残基ずつ短縮させ、またC末端側に5残基ずつ伸長させたパターンをそれぞれ用意した。

このようにして作成したコンストラクトを全て用いて、個々のパターンについてタンパク質発現を行い、その発現状態をSDSゲル電気泳動にて評価した。

### 【0073】

#### 〔実施例1〕

本実施例では、上述のようにして作成したコンストラクトのうち、立体構造解析に用いて好適なCAP-Gly様ドメインを有するKIAA0849タンパク質(464~554)について検討した結果を説明する。

#### ii) 発現ベクターの構築

##### (1) 第1次PCR

KIAA0849タンパク質をコードするcDNA (DDBJ accession No. AB020656. 2) がプラスミドpBluescriptII SK+にクローン化されたプラスミドを含む組換え大腸

菌培養液を用いて、5'プライマー1（配列番号16），3'プライマー1（配列番号17）を用いてPCRを行った。PCR反応液組成は、表1に示す通りとし、プログラムは、通常のPCRのプロトコルに従った。

【0074】

【表1】

【表1】第1次PCR反応の反応液組成

組成	濃度	添加量	終濃度
鋳型プラスミド	( $\times 1/101$ )	3 $\mu$ L	( $\times 3/200$ )
5' プライマー1	0.25 $\mu$ M	4 $\mu$ L	0.05 $\mu$ M
3' プライマー1	0.25 $\mu$ M	4 $\mu$ L	0.05 $\mu$ M
dNTPs（東洋紡）	2 mM	2 $\mu$ L	0.2 mM
Expand HiFi 緩衝液（15mM 塩化マグネシウム含有）（ロッシュ）	(10 $\times$ )	2 $\mu$ L	(1 $\times$ )
滅菌蒸留水		4.85 $\mu$ L	
DNA ポリメラーゼ（ロッシュ）	3.5 U/ $\mu$ L	0.15 $\mu$ L	0.02625 U/ $\mu$ L
合計量		20 $\mu$ L	

【0075】

(2) 第2次PCR

次に、上記反応によって得られた第1次PCR産物と、T7プロモーター配列の下流にHisタグ配列を有する5'プライマー2(配列番号19)とT7ターミネーター配列を有する3'プライマー2(配列番号20)、及びユニバーサルプライマー-U2(配列番号21)とを用いて、第2次PCRを行った。PCR反応液組成は、表2に示す通りとし、プログラムは上記第1次PCRと同様とした。

【0076】

【表2】

【表2】第2次PCR反応の反応液組成

組成	濃度	添加量	終濃度
第1次PCR産物（鋳型）	( $\times 1/5$ )	5 $\mu$ L	( $\times 1/20$ )
5'プライマー2	2 $\mu$ M	0.5 $\mu$ L	0.05 $\mu$ M
3'プライマー2	2 $\mu$ M	0.5 $\mu$ L	0.05 $\mu$ M
ユニバーサルプライマー-U2	100 $\mu$ M	0.2 $\mu$ L	1 $\mu$ M
dNTPs（東洋紡）	2 mM	2 $\mu$ L	0.2 mM
Expand HiFi 緩衝液（15mM 塩化マグネシウム含有）（ロッシュ）	(10 $\times$ )	2 $\mu$ L	(1 $\times$ )
滅菌蒸留水		9.65 $\mu$ L	
DNA ポリメラーゼ（ロッシュ）	3.5 U/ $\mu$ L	0.15 $\mu$ L	0.02625 U/ $\mu$ L
合計量		20 $\mu$ L	

## 【0077】

この結果、T7プロモーターの制御下で、Hisタグ配列とKIAA0849タンパク質（464～554）との融合タンパク質を発現することのできる直鎖状二本鎖DNA断片を増幅できた。

## 【0078】

## (3) クローン化

上記第2次PCR反応により得られたDNA断片を、TOPO TA-cloning kit (Invitrogen社) により、ベクターpPCR2.1 (Invitrogen社) にクローン化することにより、発現ベクターP011213-03を構築した。

## 【0079】

## iii) KIAA0849タンパク質（464～554）タンパク質の発現

<透析法を用いた無細胞タンパク質合成法による<sup>15</sup>N標識CAP-Gly様ドメインの合成>

大腸菌S30抽出液は、Zubayら(Annu. Rev. Genet. 7, 267-287, 1973)の方法に従って、大腸菌BL21 codon plus株から調製した。

タンパク質合成反応は、表3に示す反応液組成の反応液3mLおよび表4に示す透析外液組成の透析外液30mLのスケールで、30℃で一晩行った。

## 【0080】

【表 3】

【表 3】 反応液組成	
組成	終濃度
Hepes-KOH (pH 7.5)	58 mM
DTT	1.8 mM
ATP	1.2 mM
CTP	0.8 mM
GTP	0.8 mM
UTP	0.8 mM
クレアチンリン酸	80 mM
クレアチンキナーゼ	0.25 mg/mL
ポリエチレングリコール (平均分子量: 8000)	4.0 %
3',5'-cAMP	0.64 mM
L(-)-5-フォルミル-5,6,7,8-テトラヒドロ葉酸	68 $\mu$ M
大腸菌トータル tRNA	175 $\mu$ g/mL
グルタミン酸カリウム	210 mM
酢酸アンモニウム	27.5 mM
酢酸マグネシウム	10.7 mM
[ $^{15}$ N]標識体アミノ酸ミクスチャー	3 mg/mL
L-[ $^{15}$ N]システイン	1 mM
L-[ $^{15}$ N] トリプトファン	1 mM
L-[ $^{15}$ N] グルタミン	1 mM
L-[ $^{15}$ N]アスパラギン	1 mM
アジ化ナトリウム	0.05 %
T7 RNA ポリメラーゼ	66.6 $\mu$ g/mL
S30抽出液	30 %
鋳型 DNA (P011213-03)	1 $\mu$ g/mL

【0081】

【表 4】

【表 4】 透析外液組成	
組成	終濃度
Hepes-KOH (pH 7.5)	58 mM
DTT	1.8 mM
ATP	1.2 mM
CTP	0.8 mM
GTP	0.8 mM
UTP	0.8 mM
クレアチンリン酸	80 mM
クレアチンキナーゼ	0.25 mg/mL
ポリエチレングリコール (平均分子量, 8000)	4.0 %
3',5'-cAMP	0.64 mM
L-(+)-5-フォルミル-5,6,7,8-テトラヒドロ葉酸	68 $\mu$ M
グルタミン酸カリウム	210 mM
酢酸アンモニウム	27.5 mM
酢酸マグネシウム	10.7 mM
[ <sup>15</sup> N]標識体アミノ酸ミクスチャー	3 mg/mL
L-[ <sup>15</sup> N]システイン	1 mM
L-[ <sup>15</sup> N]トリプトファン	1 mM
L-[ <sup>15</sup> N]グルタミン	1 mM
L-[ <sup>15</sup> N]アスパラギン	1 mM
アジ化ナトリウム	0.05 %

## 【0082】

## &lt; SDSゲル電気泳動による発現状態の判定 &gt;

合成反応終了後、定法に従ってSDSゲル電気泳動を行い、得られたタンパク質の発現状態を判定した。

その結果を図1Aに示す。図1Aから、KIAA0849タンパク質(464~554)が発現していることが確認できた。このKIAA0849タンパク質(464~554)のCAP-Gly様ドメインのアミノ酸配列は配列番号1に示される。

## 【0083】

## [実施例 2~5]

本実施例 2~5 では、上述のようにして作成したコンストラクトのうち、実施例 1 における配列番号 1 記載のCAP-Gly様ドメインを有する、KIAA0849タンパク質(414~558) (実施例 2 とする。)、KIAA0849タンパク質(454~554) (実施例 3)、KIAA0849タンパク質(454~559) (実施例 4)、KIAA0849タンパク質(464~559) (実施例 5) について検討した結果を説明する。

即ち、実施例 1 における第 1 次 PCR 及び第 2 次 PCR に用いた各種プライマーをそれぞれ表 5 に示すように代え、それ以外は実施例 1 と同様にして発現ベクターを構築し、得られた直鎖状二本鎖 DNA 断片を鋳型 DNA としてタンパク質合成を行った。

【0084】

【表 5】

【表 5】 第 1 次 PCR 及び第 2 次 PCR で用いた各プライマーの配列番号

実施例番号	第 1 次 PCR		第 2 次 PCR		ユニバーサルプライマー
	5'プライマー-1	3'プライマー-1	5'プライマー-2	3'プライマー-2	
1	配列番号 16	配列番号 17	配列番号 19	配列番号 20	配列番号 21
2	配列番号 11	配列番号 12	配列番号 13	配列番号 14	(使用せず)
3	配列番号 15	配列番号 17	配列番号 19	配列番号 20	配列番号 21
4	配列番号 15	配列番号 18	配列番号 19	配列番号 20	配列番号 21
5	配列番号 16	配列番号 18	配列番号 19	配列番号 20	配列番号 21

【0085】

ここで、実施例 2 については、第 1 次 PCR、第 2 次 PCR における各反応液の組成を表 6 及び表 7 に示す通りとした。

【0086】

【表 6】

【表 6】 第 1 次 PCR 反応の反応液組成

組成	濃度	添加量	終濃度
鋳型プラスミド	1nmol/ $\mu$ L	5 $\mu$ L	0.2nmol/ $\mu$ L
5' プライマー-1	1 $\mu$ M	1.25 $\mu$ L	0.05 $\mu$ M
3' プライマー-1	1 $\mu$ M	1.25 $\mu$ L	0.05 $\mu$ M
dNTPs (東洋紡)	2 mM	2.5 $\mu$ L	0.2 mM
Expand HiFi 緩衝液 (15mM 塩化マグネシウム含有) (ロッシュ)	(10 $\times$ )	2.5 $\mu$ L	(1 $\times$ )
滅菌蒸留水		12.3125 $\mu$ L	
DNA ポリメラーゼ (ロッシュ)	3.5 U/ $\mu$ L	0.1875 $\mu$ L	0.02625 U/ $\mu$ L
合計量		25 $\mu$ L	

【0087】



## 【表 7】

【表 7】 第 2 次 PCR 反応の反応液組成

組成	濃度	添加量	終濃度
第 1 次 PCR 産物 (鋳型)	( $\times 1/10$ )	8 $\mu$ L	( $\times 1/25$ )
5' プライマー-2	1 $\mu$ M	0.5 $\mu$ L	0.025 $\mu$ M
3' プライマー-2	1 $\mu$ M	0.5 $\mu$ L	0.025 $\mu$ M
DNTPs (東洋紡)	2 mM	2 $\mu$ L	0.2 mM
Expand HiFi 緩衝液 (15mM 塩化マグネシウム含有) (ロッシュ)	(10 $\times$ )	2 $\mu$ L	(1 $\times$ )
滅菌蒸留水		6.85 $\mu$ L	
DNA ポリメラーゼ (ロッシュ)	3.5 U/ $\mu$ L	0.15 $\mu$ L	0.02625 U/ $\mu$ L
合計量		20 $\mu$ L	

## 【0088】

合成反応終了後、SDSゲル電気泳動による発現状態の判定を行った。

その結果を図 1B~Eに示す。図 1B~Eから、KIAA0849タンパク質 (414~558) (実施例 2)、KIAA0849タンパク質 (454~554) (実施例 3)、KIAA0849タンパク質 (454~559) (実施例 4)、KIAA0849タンパク質 (464~559) (実施例 5) が発現していることが確認できた。各実施例にかかるタンパク質のアミノ酸配列は、配列番号 3, 5, 7, 9 にそれぞれ示される。

## 【0089】

## [比較例 1~3]

上述のようにして作成したコンストラクトのうち、KIAA0849タンパク質のアミノ酸残基番号 474 番目から 539 番目のアミノ酸配列を有するポリペプチド a (比較例 1 とする。)、アミノ酸残基番号 454 番目から 539 番目のアミノ酸配列を有するポリペプチド b (比較例 2)、及びアミノ酸残基番号 454 番目から 549 番目のアミノ酸配列を有するポリペプチド c (比較例 3) について、上述の実施例 1 と同様にして発現ベクターを構築し、得られた直鎖状二本鎖 DNA 断片を鋳型 DNA としてタンパク質合成を行った。この際、実施例 1 における第 1 次 PCR に用いた各種プライマーとしては、本比較例に適したものとして設計したアミノ酸配列のものに代えた。

そして、得られた試料について、SDSゲル電気泳動により発現状態の判定を行った。

その結果を図 2 A, B, C に示す。比較例 1, 2 においては、図 2 A, B から明らかなように、各ポリペプチド a, b のアミノ酸配列から求められる推定分子量 MW a、MW b に対応する位置（それぞれ、MW a = 11.1 kDa, MW b = 13.1 kDa）にバンドが現れていないことから、目的とするタンパク質が実際に発現していないことが確認できた。また、比較例 3 では、ポリペプチド c の推定分子量 MW c（14.2 kDa）に対応する位置よりも実際のバンドが上側に現れたことから（図 2 c 参照）、目的とするタンパク質が良好な発現状態で得られていないことが明らかになった。

#### iv) 構造安定性評価

##### 【0090】

##### <<sup>15</sup>N 標識ドメインの精製>

上記実施例 1～5 で合成した各種目的タンパク質の精製を行った。

<sup>15</sup>N 標識ドメインタンパク質の精製には、ヒスチジントグとニッケルの親和性を利用した。操作は 4℃ で行った。まず合成反応終了後、3 ml の反応液を 4.2 ml の洗浄緩衝液 [50 mM リン酸ナトリウム (pH 8.0) / 300 mM 塩化ナトリウム / 10 mM イミダゾール] で希釈、回収し、1960×g、5 分間遠心して沈殿を取り除いた。次に、得た上清を 0.8 ml の Ni-NTA 樹脂 (キアゲン社) に通して吸着させ、9.6 ml の洗浄緩衝液を通すことで夾雑物を除去した。最後に 4 ml の溶出緩衝液 [50 mM リン酸ナトリウム (pH 8.0) / 300 mM 塩化ナトリウム / 500 mM イミダゾール] を通すことでサンプルを樹脂から遊離させた。以上の手順により、0.88 mg の精製サンプルを得た。

##### 【0091】

##### <構造安定性評価のための試料調製>

精製サンプルを NMR 測定に適した溶媒にするために、20 mM リン酸ナトリウム (pH 6.0) / 100 mM 塩化ナトリウム溶液に置換した。その後、サンプルを 0.25 ml (サンプル濃度 0.28 mM) まで濃縮した。以上の操作には限外ろ過装置 (ビバスピ 2; ザルトリウス社) を用いた。最後に 0.03 ml の重水を添加して、構造安定性評価用試料とした。

##### <NMR 測定による構造安定性評価>

NMR測定用のサンプル管にはシゲミ社の対称型マイクロ試料管(5 mmプローブ用)を用いた。NMR測定は、600 MHzのNMR装置(Avance600; ブルカー社)で、温度25℃のもとで行った。判定には、 $^1\text{H}$ の1次元スペクトル(以後1Dスペクトルと略記)、および $^1\text{H}$ - $^{15}\text{N}$ 2次元HSQCスペクトル(以後 $^{15}\text{N}$ -HSQCスペクトルと略記)を用いたその条件は下表のとおりであった。

【0092】

【表 8】

【表 8】 構造安定性評価のための NMR 測定条件

スペクトル	積算回数	中心周波数	スペクトル幅	データポイント数
1D	128	$^1\text{H}$ : 2822 Hz	$^1\text{H}$ : 8013 Hz	$^1\text{H}$ : 8192
$^{15}\text{N}$ HSQC	16	$^1\text{H}$ : 2822 Hz $^{15}\text{N}$ : 7085 Hz	$^1\text{H}$ : 8013 Hz $^{15}\text{N}$ : 2190 Hz	$^1\text{H}$ : 2048 $^{15}\text{N}$ : 128

【0093】

その結果を図3～図7に示す。

NMR測定の結果、図3～図7に示すように、1Dスペクトルのメチル領域の高磁場側(0.7ppmから-0.5ppm付近)に、高磁場シフトしたシグナルが認められた。また、 $^{15}\text{N}$ -HSQCスペクトルには、7ppmから9ppmにわたって分離したアミドプロトンのシグナルが認められた。

これらのシグナルの現れ方は、安定な立体構造を形成しているタンパク質に特徴的であることから、上記実施例1～5で得られた各タンパク質は安定な立体構造を形成していると判定した。

以上のように、本実施例においては、全長KIAA0849タンパク質からコンピュータによりタンパク質の構造・機能を有する構成要素(ドメイン)のアミノ酸配列を予測して、予測した領域を基準として種々のコンストラクトを全て作成してタンパク質発現を行い、実際に取得したタンパク質をSDSゲル電気泳動でその発現状態を確認した。そして、さらに安定な立体構造を有するか否かはNMR測定により評価し、全てのタンパク質について優れた構造安定性を確認した。

したがって、本実施例により、実際に安定な立体構造をもつ(フォールドする)CAP-Gly様ドメインのアミノ酸配列を正確に決定できたことが確認された。

また、このような分子量の小さい、ドメインを形成するタンパク質を用いることで、精度の高い立体構造解析を比較的容易に行うことが可能となった。

そこで、実施例 1 の KIAA0849 タンパク質 (464~554) を用いて、以下のようにして立体構造解析を行った。

#### 【0094】

v) ヒトターバン腫瘍症候群に関与するガン抑制遺伝子 (K I A A 0 8 4 9) 産物に含まれる CAP-Gly 様ドメインタンパク質の NMR による構造決定

##### <<sup>13</sup>C<sup>15</sup>N 標識ドメインの精製>

全ての炭素核および窒素核をそれぞれ安定同位体である炭素<sup>13</sup>、窒素<sup>15</sup>により置換した配列番号 22 に記載されたタンパク質を、上述の無細胞タンパク質発現系により作成した。配列番号 22 に記載されたタンパク質は、配列番号 1 に記載されたタンパク質の N 末端に GSSGSSG、C 末端に SGPSSG で表されるアミノ酸残基を付加したものであり、これらの付加配列は立体構造には影響を与えないものである。したがって、配列番号 22 に記載されたタンパク質の立体構造を解析することは、配列番号 1 に記載された本発明のタンパク質の立体構造を与える。

得られた高純度標品は高速遠心機用の限外濾過膜付タンパク質濃縮器を用いて標品濃度およそ 0.8mM まで濃縮後、NMR 解析用標品緩衝液により 10 倍に希釈した。この濃縮、希釈の操作を 3 回繰返し、標品精製用の緩衝液を NMR 解析用標品緩衝液に完全に置換した。用いた NMR 解析用標品緩衝液の組成は、20mM リン酸ナトリウム緩衝液、100mM 塩化ナトリウム、1 mM ジチオスレイトールであり、pH は 6.0 である。NMR 解析用標品緩衝液に完全置換された標品の最終的な標品濃度はおよそ 0.8mM である。得られた標品は外径 5mm の NMR 測定用試料管に注入した後、25℃ にて 2 時間保存することにより安定化させた。

#### 【0095】

##### <NMR 測定>

NMR 実験にはスイス・ブルカー社製 DRX600 および DRX800 を使用した。全ての測定は 25℃ で行った。主鎖シグナル帰属を目的とした NMR 実験として、二次元スペクトルは <sup>1</sup>H-<sup>15</sup>N HSQC、三次元スペクトルは HNC<sup>15</sup>O、HN(CO)CA、HNCA、CBCA(CO)NH、HNCACB、HBHA(CBCACO)NH、H(CCCO)NH、C(CCCO)NH、<sup>15</sup>N-edited NOESY を測定

した。また、側鎖シグナル帰属を目的としたNMR実験として、二次元スペクトルは $^1\text{H}$ - $^{13}\text{C}$  HSQC、三次元スペクトルは脂肪族系側鎖用HCCH-COSY、同HCCH-TOCSY、同 $^{13}\text{C}$ -edited NOESY、芳香族系側鎖用HCCH-COSY、同 $^{13}\text{C}$ -edited NOESY さらにHNHB、HN(CO)HBを測定した。

### 【0096】

#### <測定データの解析>

測定データをアメリカ・シリコングラフィックス社製ワークステーションOctane2およびOrigin3800を用いてフーリエ変換計算を行い、各二次元および三次元スペクトルを得た。得られたスペクトルデータに基づいて、アミノ酸残基における主鎖シグナルとして $\alpha$ 位および $\beta$ 位の炭素核である $\text{C}\alpha$ と $\text{C}\beta$ 、カルボニル基の炭素核である $\text{C}'$ 、 $\alpha$ 位および $\beta$ 位の水素核である $\text{H}\alpha$ と $\text{H}\beta$ 、アミド基の水素核であるHN、アミド基の窒素核であるNを連鎖的に帰属した。この手法は、まずHN(CO)Ca上で隣接残基の $\text{C}\alpha$ シグナルの化学シフト値に一致するシグナルをHNCA上で検索し、自身と隣接する残基の $\text{C}\alpha$ シグナルの連鎖性を明らかにする。この操作を繰り返すことによりプロリン残基および何らかの原因でシグナルが観測できない場合を除く全ての $\text{C}\alpha$ シグナルを連鎖的に帰属できる。同様の操作を行うことにより、C(CCCO)NH、CBCA(CO)NHとHNCACBにより $\text{C}\beta$ シグナル、H(CCCO)NH、HBHA(CBCACO)NHと $^{15}\text{N}$ -edited NOESYにより $\text{H}\alpha$ 、 $\text{H}\beta$ シグナル、さらにHNCOにより $\text{C}'$ シグナルを帰属することで、より正確に帰属を行うことができる。さらに、得られた主鎖帰属情報および側鎖帰属用に測定したスペクトルデータを用いて $\gamma$ 、 $\delta$ 、 $\epsilon$ 、 $\zeta$ 、 $\eta$ 位の炭素核、窒素核、水素核の帰属を行う。以上の操作によりほぼ全てのアミノ酸残基に対するシグナルの帰属データを得た。また、 $^{15}\text{N}$ -edited NOESY上の1142個のシグナル、脂肪族系側鎖用 $^{13}\text{C}$ -edited NOESY上の2158個のシグナル、芳香族系側鎖用 $^{13}\text{C}$ -edited NOESY上の209個のシグナルから距離制限データを得た。主鎖帰属の際に得られた $\text{C}\alpha$ 、 $\text{C}\beta$ 、 $\text{C}'$ 、 $\text{H}\alpha$ 、 $\text{H}\beta$ 、HN、Nシグナルの化学シフト値から、ポリペプチド主鎖二面角である $\phi$ 角、および $\psi$ 角を高精度で予測するソフトウェアTALOSを用いて、42残基に対する $\phi$ 、 $\psi$ 角データを得た。さらに、HNHBおよびHN(CO)HBのシグナルパターンから35残基における側鎖二面角である $\chi$ 角のデータを得た。これらシグナルの帰属データ、距離

制限データ、 $\phi$ 、 $\psi$ 、 $\chi$  角度制限データを元に、タンパク質立体構造計算用ソフトウェアであるCNSを用いてドメイン構造の計算を行った。得られた立体構造に基づいて、供した距離制限が満たされていないNOE群を比較検討しながら最適化を行った。これを繰返すことで最終的に全ての角度制限と2667個の距離制限を用いて計算し、エネルギー的に安定した立体構造20個を得た。これら構造において二次構造を形成するアミノ酸残基部分の収斂度は、主鎖の原子団に対して0.29 Å、側鎖を含めた水素原子以外の全原子団に対しては0.76 Åであった。

#### 【0097】

構造座標を以下の立体構造座標 1 ~ 20 に示す。

以下の立体構造座標データは、プロテインデータバンク (PDB) のフォーマットに準じて記載されているものである。1列目のATOMはこの行が原子座標の行であることを示し、2列目は、その原子の順番を、3列目はアミノ酸残基等における原子の区別を、4列目はアミノ酸残基等を、5列目は配列番号22に対応したアミノ酸の番号を、6, 7, 8列目はその原子の座標 (a軸、b軸、c軸方向の順番でÅ単位) を、9列目は、その原子の占有率 (本発明においてはすべて1.00) を、10列目はその原子の温度因子を示している。最終行は、この表の終わりの行であることを示している。

#### 【0098】

立体構造座標表 1

ATOM 1	N	GLY A	1	120.138	11.140	-2.903	1.00	0.00
ATOM 2	CA	GLY A	1	120.658	10.305	-1.785	1.00	0.00
ATOM 3	C	GLY A	1	120.202	8.862	-1.879	1.00	0.00
ATOM 4	O	GLY A	1	119.025	8.590	-2.119	1.00	0.00
ATOM 5	1H	GLY A	1	120.758	11.050	-3.733	1.00	0.00
ATOM 6	2H	GLY A	1	120.103	12.139	-2.617	1.00	0.00
ATOM 7	3H	GLY A	1	119.180	10.832	-3.164	1.00	0.00
ATOM 8	1HA	GLY A	1	121.737	10.331	-1.802	1.00	0.00
ATOM 9	2HA	GLY A	1	120.312	10.720	-0.850	1.00	0.00
ATOM 10	N	SER A	2	121.135	7.935	-1.688	1.00	0.00

ATOM 11	CA	SER A	2	120.822	6.512	-1.752	1.00	0.00
ATOM 12	C	SER A	2	119.883	6.109	-0.621	1.00	0.00
ATOM 13	O	SER A	2	119.959	6.647	0.484	1.00	0.00
ATOM 14	CB	SER A	2	122.107	5.683	-1.684	1.00	0.00
ATOM 15	OG	SER A	2	122.628	5.441	-2.980	1.00	0.00
ATOM 16	H	SER A	2	122.055	8.214	-1.500	1.00	0.00
ATOM 17	HA	SER A	2	120.333	6.322	-2.695	1.00	0.00
ATOM 18	1HB	SER A	2	122.846	6.217	-1.107	1.00	0.00
ATOM 19	2HB	SER A	2	121.896	4.735	-1.211	1.00	0.00
ATOM 20	HG	SER A	2	122.628	6.259	-3.482	1.00	0.00
ATOM 21	N	SER A	3	118.997	5.160	-0.902	1.00	0.00
ATOM 22	CA	SER A	3	118.042	4.685	0.092	1.00	0.00
ATOM 23	C	SER A	3	118.645	3.564	0.933	1.00	0.00
ATOM 24	O	SER A	3	118.658	2.404	0.523	1.00	0.00
ATOM 25	CB	SER A	3	116.764	4.194	-0.591	1.00	0.00
ATOM 26	OG	SER A	3	117.063	3.463	-1.768	1.00	0.00
ATOM 27	H	SER A	3	118.986	4.769	-1.801	1.00	0.00
ATOM 28	HA	SER A	3	117.798	5.513	0.739	1.00	0.00
ATOM 29	1HB	SER A	3	116.220	3.553	0.087	1.00	0.00
ATOM 30	2HB	SER A	3	116.152	5.044	-0.854	1.00	0.00
ATOM 31	HG	SER A	3	117.138	4.068	-2.510	1.00	0.00
ATOM 32	N	GLY A	4	119.143	3.920	2.114	1.00	0.00
ATOM 33	CA	GLY A	4	119.741	2.933	2.993	1.00	0.00
ATOM 34	C	GLY A	4	119.727	3.367	4.446	1.00	0.00
ATOM 35	O	GLY A	4	118.924	4.213	4.840	1.00	0.00
ATOM 36	H	GLY A	4	119.105	4.860	2.388	1.00	0.00
ATOM 37	1HA	GLY A	4	119.195	2.005	2.901	1.00	0.00
ATOM 38	2HA	GLY A	4	120.764	2.767	2.689	1.00	0.00
ATOM 39	N	SER A	5	120.616	2.785	5.244	1.00	0.00

ATOM 40	CA	SER A	5	120.703	3.116	6.662	1.00	0.00
ATOM 41	C	SER A	5	122.050	3.754	6.990	1.00	0.00
ATOM 42	O	SER A	5	122.125	4.697	7.777	1.00	0.00
ATOM 43	CB	SER A	5	120.499	1.861	7.513	1.00	0.00
ATOM 44	OG	SER A	5	119.829	2.169	8.723	1.00	0.00
ATOM 45	H	SER A	5	121.230	2.118	4.870	1.00	0.00
ATOM 46	HA	SER A	5	119.919	3.824	6.886	1.00	0.00
ATOM 47	1HB	SER A	5	119.907	1.147	6.961	1.00	0.00
ATOM 48	2HB	SER A	5	121.461	1.428	7.747	1.00	0.00
ATOM 49	HG	SER A	5	120.475	2.376	9.402	1.00	0.00
ATOM 50	N	SER A	6	123.109	3.233	6.381	1.00	0.00
ATOM 51	CA	SER A	6	124.454	3.751	6.607	1.00	0.00
ATOM 52	C	SER A	6	124.821	4.789	5.552	1.00	0.00
ATOM 53	O	SER A	6	124.732	4.528	4.353	1.00	0.00
ATOM 54	CB	SER A	6	125.472	2.611	6.594	1.00	0.00
ATOM 55	OG	SER A	6	126.514	2.846	7.526	1.00	0.00
ATOM 56	H	SER A	6	122.985	2.481	5.763	1.00	0.00
ATOM 57	HA	SER A	6	124.467	4.223	7.579	1.00	0.00
ATOM 58	1HB	SER A	6	124.978	1.686	6.853	1.00	0.00
ATOM 59	2HB	SER A	6	125.901	2.525	5.606	1.00	0.00
ATOM 60	HG	SER A	6	126.892	2.007	7.803	1.00	0.00
ATOM 61	N	GLY A	7	125.235	5.968	6.007	1.00	0.00
ATOM 62	CA	GLY A	7	125.610	7.027	5.088	1.00	0.00
ATOM 63	C	GLY A	7	127.112	7.214	5.001	1.00	0.00
ATOM 64	O	GLY A	7	127.869	6.243	5.033	1.00	0.00
ATOM 65	H	GLY A	7	125.286	6.119	6.974	1.00	0.00
ATOM 66	1HA	GLY A	7	125.230	6.788	4.107	1.00	0.00
ATOM 67	2HA	GLY A	7	125.161	7.951	5.421	1.00	0.00
ATOM 68	N	LEU A	8	127.545	8.467	4.889	1.00	0.00



ATOM 69	CA	LEU A	8	128.966	8.780	4.795	1.00	0.00
ATOM 70	C	LEU A	8	129.559	8.221	3.505	1.00	0.00
ATOM 71	O	LEU A	8	130.682	7.717	3.493	1.00	0.00
ATOM 72	CB	LEU A	8	129.719	8.220	6.004	1.00	0.00
ATOM 73	CG	LEU A	8	129.030	8.435	7.352	1.00	0.00
ATOM 74	CD1	LEU A	8	129.288	7.256	8.279	1.00	0.00
ATOM 75	CD2	LEU A	8	129.506	9.731	7.991	1.00	0.00
ATOM 76	H	LEU A	8	126.893	9.197	4.867	1.00	0.00
ATOM 77	HA	LEU A	8	129.068	9.855	4.786	1.00	0.00
ATOM 78	1HB	LEU A	8	129.853	7.157	5.856	1.00	0.00
ATOM 79	2HB	LEU A	8	130.692	8.685	6.043	1.00	0.00
ATOM 80	HG	LEU A	8	127.964	8.510	7.196	1.00	0.00
ATOM 81	1HD1	LEU A	8	129.004	7.522	9.286	1.00	0.00
ATOM 82	2HD1	LEU A	8	130.337	7.002	8.254	1.00	0.00
ATOM 83	3HD1	LEU A	8	128.704	6.408	7.952	1.00	0.00
ATOM 84	1HD2	LEU A	8	130.301	9.516	8.691	1.00	0.00
ATOM 85	2HD2	LEU A	8	128.684	10.199	8.512	1.00	0.00
ATOM 86	3HD2	LEU A	8	129.872	10.397	7.224	1.00	0.00
ATOM 87	N	ALA A	9	128.795	8.314	2.423	1.00	0.00
ATOM 88	CA	ALA A	9	129.241	7.818	1.128	1.00	0.00
ATOM 89	C	ALA A	9	129.592	8.968	0.192	1.00	0.00
ATOM 90	O	ALA A	9	128.799	9.890	0.000	1.00	0.00
ATOM 91	CB	ALA A	9	128.171	6.934	0.504	1.00	0.00
ATOM 92	H	ALA A	9	127.908	8.725	2.497	1.00	0.00
ATOM 93	HA	ALA A	9	130.123	7.216	1.289	1.00	0.00
ATOM 94	1HB	ALA A	9	127.782	6.258	1.251	1.00	0.00
ATOM 95	2HB	ALA A	9	128.602	6.365	-0.308	1.00	0.00
ATOM 96	3HB	ALA A	9	127.369	7.552	0.126	1.00	0.00
ATOM 97	N	MET A	10	130.785	8.908	-0.389	1.00	0.00

ATOM 98	CA	MET A	10	131.242	9.945	-1.306	1.00	0.00
ATOM 99	C	MET A	10	131.920	9.331	-2.528	1.00	0.00
ATOM 100	O	MET A	10	133.135	9.442	-2.697	1.00	0.00
ATOM 101	CB	MET A	10	132.206	10.896	-0.594	1.00	0.00
ATOM 102	CG	MET A	10	131.568	11.663	0.553	1.00	0.00
ATOM 103	SD	MET A	10	132.377	13.245	0.863	1.00	0.00
ATOM 104	CE	MET A	10	132.247	14.013	-0.751	1.00	0.00
ATOM 105	H	MET A	10	131.373	8.148	-0.197	1.00	0.00
ATOM 106	HA	MET A	10	130.376	10.503	-1.632	1.00	0.00
ATOM 107	1HB	MET A	10	133.031	10.321	-0.200	1.00	0.00
ATOM 108	2HB	MET A	10	132.585	11.609	-1.310	1.00	0.00
ATOM 109	1HG	MET A	10	130.531	11.846	0.314	1.00	0.00
ATOM 110	2HG	MET A	10	131.629	11.062	1.448	1.00	0.00
ATOM 111	1HE	MET A	10	133.228	14.073	-1.200	1.00	0.00
ATOM 112	2HE	MET A	10	131.839	15.007	-0.644	1.00	0.00
ATOM 113	3HE	MET A	10	131.598	13.422	-1.380	1.00	0.00
ATOM 114	N	PRO A	11	131.139	8.673	-3.402	1.00	0.00
ATOM 115	CA	PRO A	11	131.671	8.043	-4.613	1.00	0.00
ATOM 116	C	PRO A	11	132.451	9.024	-5.486	1.00	0.00
ATOM 117	O	PRO A	11	133.544	8.709	-5.957	1.00	0.00
ATOM 118	CB	PRO A	11	130.423	7.547	-5.350	1.00	0.00
ATOM 119	CG	PRO A	11	129.365	7.447	-4.304	1.00	0.00
ATOM 120	CD	PRO A	11	129.682	8.497	-3.277	1.00	0.00
ATOM 121	HA	PRO A	11	132.304	7.202	-4.372	1.00	0.00
ATOM 122	1HB	PRO A	11	130.152	8.253	-6.120	1.00	0.00
ATOM 123	2HB	PRO A	11	130.626	6.585	-5.795	1.00	0.00
ATOM 124	1HG	PRO A	11	128.400	7.638	-4.744	1.00	0.00
ATOM 125	2HG	PRO A	11	129.387	6.466	-3.855	1.00	0.00
ATOM 126	1HD	PRO A	11	129.162	9.416	-3.504	1.00	0.00

ATOM 127	2HD	PRO A	11	129.421	8.149	-2.288	1.00	0.00
ATOM 128	N	PRO A	12	131.907	10.235	-5.713	1.00	0.00
ATOM 129	CA	PRO A	12	132.573	11.253	-6.531	1.00	0.00
ATOM 130	C	PRO A	12	133.937	11.637	-5.966	1.00	0.00
ATOM 131	O	PRO A	12	134.781	12.188	-6.673	1.00	0.00
ATOM 132	CB	PRO A	12	131.618	12.453	-6.477	1.00	0.00
ATOM 133	CG	PRO A	12	130.301	11.882	-6.078	1.00	0.00
ATOM 134	CD	PRO A	12	130.613	10.712	-5.191	1.00	0.00
ATOM 135	HA	PRO A	12	132.688	10.926	-7.553	1.00	0.00
ATOM 136	1HB	PRO A	12	131.975	13.167	-5.750	1.00	0.00
ATOM 137	2HB	PRO A	12	131.566	12.918	-7.451	1.00	0.00
ATOM 138	1HG	PRO A	12	129.729	12.621	-5.537	1.00	0.00
ATOM 139	2HG	PRO A	12	129.761	11.555	-6.954	1.00	0.00
ATOM 140	1HD	PRO A	12	130.705	11.030	-4.163	1.00	0.00
ATOM 141	2HD	PRO A	12	129.854	9.952	-5.287	1.00	0.00
ATOM 142	N	GLY A	13	134.145	11.341	-4.687	1.00	0.00
ATOM 143	CA	GLY A	13	135.408	11.661	-4.048	1.00	0.00
ATOM 144	C	GLY A	13	136.522	10.720	-4.461	1.00	0.00
ATOM 145	O	GLY A	13	137.189	10.944	-5.472	1.00	0.00
ATOM 146	H	GLY A	13	133.435	10.900	-4.171	1.00	0.00
ATOM 147	1HA	GLY A	13	135.687	12.670	-4.313	1.00	0.00
ATOM 148	2HA	GLY A	13	135.282	11.603	-2.977	1.00	0.00
ATOM 149	N	ASN A	14	136.723	9.665	-3.678	1.00	0.00
ATOM 150	CA	ASN A	14	137.765	8.687	-3.969	1.00	0.00
ATOM 151	C	ASN A	14	137.162	7.396	-4.514	1.00	0.00
ATOM 152	O	ASN A	14	137.556	6.914	-5.575	1.00	0.00
ATOM 153	CB	ASN A	14	138.580	8.389	-2.709	1.00	0.00
ATOM 154	CG	ASN A	14	139.257	9.626	-2.152	1.00	0.00
ATOM 155	OD1	ASN A	14	140.304	10.048	-2.643	1.00	0.00

ATOM 156	ND2	ASN A	14	138.660	10.215	-1.122	1.00	0.00
ATOM 157	H	ASN A	14	136.159	9.542	-2.887	1.00	0.00
ATOM 158	HA	ASN A	14	138.418	9.109	-4.718	1.00	0.00
ATOM 159	1HB	ASN A	14	137.925	7.988	-1.950	1.00	0.00
ATOM 160	2HB	ASN A	14	139.341	7.660	-2.944	1.00	0.00
ATOM 161	1HD2	ASN A	14	137.829	9.823	-0.784	1.00	0.00
ATOM 162	2HD2	ASN A	14	139.076	11.018	-0.744	1.00	0.00
ATOM 163	N	SER A	15	136.202	6.842	-3.779	1.00	0.00
ATOM 164	CA	SER A	15	135.544	5.607	-4.189	1.00	0.00
ATOM 165	C	SER A	15	134.436	5.233	-3.208	1.00	0.00
ATOM 166	O	SER A	15	133.344	4.832	-3.612	1.00	0.00
ATOM 167	CB	SER A	15	136.561	4.468	-4.286	1.00	0.00
ATOM 168	OG	SER A	15	137.099	4.375	-5.592	1.00	0.00
ATOM 169	H	SER A	15	135.930	7.274	-2.943	1.00	0.00
ATOM 170	HA	SER A	15	135.106	5.770	-5.163	1.00	0.00
ATOM 171	1HB	SER A	15	137.366	4.649	-3.590	1.00	0.00
ATOM 172	2HB	SER A	15	136.076	3.535	-4.041	1.00	0.00
ATOM 173	HG	SER A	15	136.766	3.582	-6.020	1.00	0.00
ATOM 174	N	HIS A	16	134.726	5.365	-1.919	1.00	0.00
ATOM 175	CA	HIS A	16	133.756	5.041	-0.879	1.00	0.00
ATOM 176	C	HIS A	16	134.196	5.603	0.468	1.00	0.00
ATOM 177	O	HIS A	16	133.479	6.389	1.089	1.00	0.00
ATOM 178	CB	HIS A	16	133.574	3.525	-0.778	1.00	0.00
ATOM 179	CG	HIS A	16	132.466	2.998	-1.636	1.00	0.00
ATOM 180	ND1	HIS A	16	131.131	3.188	-1.343	1.00	0.00
ATOM 181	CD2	HIS A	16	132.499	2.283	-2.786	1.00	0.00
ATOM 182	CE1	HIS A	16	130.392	2.611	-2.275	1.00	0.00
ATOM 183	NE2	HIS A	16	131.198	2.057	-3.162	1.00	0.00
ATOM 184	H	HIS A	16	135.614	5.688	-1.660	1.00	0.00

ATOM 185	HA	HIS A	16	132.814	5.491	-1.153	1.00	0.00
ATOM 186	1HB	HIS A	16	134.489	3.038	-1.081	1.00	0.00
ATOM 187	2HB	HIS A	16	133.355	3.264	0.247	1.00	0.00
ATOM 188	HD1	HIS A	16	130.779	3.672	-0.567	1.00	0.00
ATOM 189	HD2	HIS A	16	133.384	1.952	-3.310	1.00	0.00
ATOM 190	HE1	HIS A	16	129.313	2.598	-2.306	1.00	0.00
ATOM 191	HE2	HIS A	16	130.911	1.498	-3.913	1.00	0.00
ATOM 192	N	GLY A	17	135.381	5.198	0.914	1.00	0.00
ATOM 193	CA	GLY A	17	135.896	5.673	2.185	1.00	0.00
ATOM 194	C	GLY A	17	137.255	5.085	2.515	1.00	0.00
ATOM 195	O	GLY A	17	137.399	4.345	3.488	1.00	0.00
ATOM 196	H	GLY A	17	135.909	4.572	0.377	1.00	0.00
ATOM 197	1HA	GLY A	17	135.981	6.748	2.148	1.00	0.00
ATOM 198	2HA	GLY A	17	135.201	5.403	2.967	1.00	0.00
ATOM 199	N	LEU A	18	138.253	5.417	1.703	1.00	0.00
ATOM 200	CA	LEU A	18	139.607	4.918	1.913	1.00	0.00
ATOM 201	C	LEU A	18	140.527	6.030	2.407	1.00	0.00
ATOM 202	O	LEU A	18	140.851	6.956	1.663	1.00	0.00
ATOM 203	CB	LEU A	18	140.160	4.320	0.618	1.00	0.00
ATOM 204	CG	LEU A	18	139.326	3.186	0.021	1.00	0.00
ATOM 205	CD1	LEU A	18	139.476	3.153	-1.493	1.00	0.00
ATOM 206	CD2	LEU A	18	139.730	1.851	0.628	1.00	0.00
ATOM 207	H	LEU A	18	138.075	6.012	0.944	1.00	0.00
ATOM 208	HA	LEU A	18	139.562	4.144	2.665	1.00	0.00
ATOM 209	1HB	LEU A	18	140.234	5.111	-0.115	1.00	0.00
ATOM 210	2HB	LEU A	18	141.151	3.942	0.815	1.00	0.00
ATOM 211	HG	LEU A	18	138.283	3.356	0.248	1.00	0.00
ATOM 212	1HD1	LEU A	18	139.372	2.136	-1.842	1.00	0.00
ATOM 213	2HD1	LEU A	18	140.451	3.528	-1.766	1.00	0.00

ATOM 214	3HD1	LEU	A	18	138.713	3.768	-1.944	1.00	0.00
ATOM 215	1HD2	LEU	A	18	140.757	1.903	0.959	1.00	0.00
ATOM 216	2HD2	LEU	A	18	139.629	1.073	-0.113	1.00	0.00
ATOM 217	3HD2	LEU	A	18	139.092	1.630	1.471	1.00	0.00
ATOM 218	N	GLU	A	19	140.945	5.931	3.664	1.00	0.00
ATOM 219	CA	GLU	A	19	141.830	6.927	4.257	1.00	0.00
ATOM 220	C	GLU	A	19	142.859	6.267	5.168	1.00	0.00
ATOM 221	O	GLU	A	19	142.811	5.059	5.403	1.00	0.00
ATOM 222	CB	GLU	A	19	141.017	7.954	5.047	1.00	0.00
ATOM 223	CG	GLU	A	19	140.018	7.331	6.010	1.00	0.00
ATOM 224	CD	GLU	A	19	138.580	7.626	5.632	1.00	0.00
ATOM 225	OE1	GLU	A	19	138.293	8.777	5.240	1.00	0.00
ATOM 226	OE2	GLU	A	19	137.741	6.705	5.727	1.00	0.00
ATOM 227	H	GLU	A	19	140.653	5.168	4.207	1.00	0.00
ATOM 228	HA	GLU	A	19	142.347	7.431	3.454	1.00	0.00
ATOM 229	1HB	GLU	A	19	141.696	8.573	5.617	1.00	0.00
ATOM 230	2HB	GLU	A	19	140.474	8.579	4.353	1.00	0.00
ATOM 231	1HG	GLU	A	19	140.161	6.261	6.013	1.00	0.00
ATOM 232	2HG	GLU	A	19	140.202	7.721	7.000	1.00	0.00
ATOM 233	N	VAL	A	20	143.791	7.066	5.679	1.00	0.00
ATOM 234	CA	VAL	A	20	144.831	6.559	6.564	1.00	0.00
ATOM 235	C	VAL	A	20	144.232	5.988	7.845	1.00	0.00
ATOM 236	O	VAL	A	20	143.373	6.610	8.471	1.00	0.00
ATOM 237	CB	VAL	A	20	145.845	7.660	6.930	1.00	0.00
ATOM 238	CG1	VAL	A	20	147.003	7.079	7.729	1.00	0.00
ATOM 239	CG2	VAL	A	20	146.352	8.359	5.677	1.00	0.00
ATOM 240	H	VAL	A	20	143.776	8.020	5.455	1.00	0.00
ATOM 241	HA	VAL	A	20	145.358	5.773	6.043	1.00	0.00
ATOM 242	HB	VAL	A	20	145.345	8.392	7.547	1.00	0.00

ATOM 243	1HG1	VAL A	20	147.813	7.792	7.760	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.342	6.167	7.260	1.00	0.00
ATOM 245	3HG1	VAL A	20	146.674	6.864	8.735	1.00	0.00
ATOM 246	1HG2	VAL A	20	146.407	9.423	5.856	1.00	0.00
ATOM 247	2HG2	VAL A	20	145.676	8.167	4.858	1.00	0.00
ATOM 248	3HG2	VAL A	20	147.335	7.985	5.429	1.00	0.00
ATOM 249	N	GLY A	21	144.691	4.802	8.230	1.00	0.00
ATOM 250	CA	GLY A	21	144.189	4.168	9.435	1.00	0.00
ATOM 251	C	GLY A	21	143.139	3.114	9.141	1.00	0.00
ATOM 252	O	GLY A	21	142.996	2.145	9.887	1.00	0.00
ATOM 253	H	GLY A	21	145.376	4.354	7.691	1.00	0.00
ATOM 254	1HA	GLY A	21	145.013	3.703	9.954	1.00	0.00
ATOM 255	2HA	GLY A	21	143.756	4.923	10.072	1.00	0.00
ATOM 256	N	SER A	22	142.400	3.304	8.051	1.00	0.00
ATOM 257	CA	SER A	22	141.358	2.363	7.661	1.00	0.00
ATOM 258	C	SER A	22	141.934	1.233	6.815	1.00	0.00
ATOM 259	O	SER A	22	142.916	1.420	6.095	1.00	0.00
ATOM 260	CB	SER A	22	140.255	3.084	6.886	1.00	0.00
ATOM 261	OG	SER A	22	139.291	3.639	7.764	1.00	0.00
ATOM 262	H	SER A	22	142.561	4.097	7.498	1.00	0.00
ATOM 263	HA	SER A	22	140.936	1.943	8.563	1.00	0.00
ATOM 264	1HB	SER A	22	140.690	3.882	6.302	1.00	0.00
ATOM 265	2HB	SER A	22	139.763	2.384	6.227	1.00	0.00
ATOM 266	HG	SER A	22	139.736	4.075	8.494	1.00	0.00
ATOM 267	N	LEU A	23	141.319	0.059	6.906	1.00	0.00
ATOM 268	CA	LEU A	23	141.771	-1.103	6.149	1.00	0.00
ATOM 269	C	LEU A	23	141.219	-1.074	4.727	1.00	0.00
ATOM 270	O	LEU A	23	140.087	-0.646	4.499	1.00	0.00
ATOM 271	CB	LEU A	23	141.341	-2.394	6.849	1.00	0.00

ATOM 272	CG	LEU A	23	142.012	-2.651	8.199	1.00	0.00
ATOM 273	CD1	LEU A	23	141.094	-3.458	9.106	1.00	0.00
ATOM 274	CD2	LEU A	23	143.339	-3.369	8.005	1.00	0.00
ATOM 275	H	LEU A	23	140.542	-0.029	7.497	1.00	0.00
ATOM 276	HA	LEU A	23	142.849	-1.070	6.104	1.00	0.00
ATOM 277	1HB	LEU A	23	140.273	-2.356	7.002	1.00	0.00
ATOM 278	2HB	LEU A	23	141.566	-3.224	6.197	1.00	0.00
ATOM 279	HG	LEU A	23	142.211	-1.706	8.682	1.00	0.00
ATOM 280	1HD1	LEU A	23	140.445	-4.074	8.503	1.00	0.00
ATOM 281	2HD1	LEU A	23	140.499	-2.784	9.705	1.00	0.00
ATOM 282	3HD1	LEU A	23	141.689	-4.085	9.753	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.169	-4.436	7.969	1.00	0.00
ATOM 284	2HD2	LEU A	23	143.997	-3.138	8.830	1.00	0.00
ATOM 285	3HD2	LEU A	23	143.792	-3.046	7.080	1.00	0.00
ATOM 286	N	ALA A	24	142.025	-1.531	3.776	1.00	0.00
ATOM 287	CA	ALA A	24	141.617	-1.558	2.376	1.00	0.00
ATOM 288	C	ALA A	24	142.162	-2.794	1.669	1.00	0.00
ATOM 289	O	ALA A	24	143.002	-3.511	2.211	1.00	0.00
ATOM 290	CB	ALA A	24	142.082	-0.294	1.668	1.00	0.00
ATOM 291	H	ALA A	24	142.916	-1.859	4.019	1.00	0.00
ATOM 292	HA	ALA A	24	140.538	-1.584	2.345	1.00	0.00
ATOM 293	1HB	ALA A	24	143.093	-0.432	1.314	1.00	0.00
ATOM 294	2HB	ALA A	24	142.051	0.537	2.357	1.00	0.00
ATOM 295	3HB	ALA A	24	141.432	-0.091	0.830	1.00	0.00
ATOM 296	N	GLU A	25	141.678	-3.036	0.456	1.00	0.00
ATOM 297	CA	GLU A	25	142.117	-4.186	-0.326	1.00	0.00
ATOM 298	C	GLU A	25	142.455	-3.774	-1.756	1.00	0.00
ATOM 299	O	GLU A	25	141.823	-2.884	-2.323	1.00	0.00
ATOM 300	CB	GLU A	25	141.032	-5.265	-0.338	1.00	0.00



ATOM 301	CG	GLU A	25	141.479	-6.569	-0.978	1.00	0.00
ATOM 302	CD	GLU A	25	140.325	-7.520	-1.231	1.00	0.00
ATOM 303	OE1	GLU A	25	140.422	-8.335	-2.172	1.00	0.00
ATOM 304	OE2	GLU A	25	139.324	-7.450	-0.486	1.00	0.00
ATOM 305	H	GLU A	25	141.010	-2.427	0.076	1.00	0.00
ATOM 306	HA	GLU A	25	143.004	-4.585	0.140	1.00	0.00
ATOM 307	1HB	GLU A	25	140.736	-5.472	0.680	1.00	0.00
ATOM 308	2HB	GLU A	25	140.178	-4.896	-0.885	1.00	0.00
ATOM 309	1HG	GLU A	25	141.955	-6.348	-1.921	1.00	0.00
ATOM 310	2HG	GLU A	25	142.188	-7.053	-0.323	1.00	0.00
ATOM 311	N	VAL A	26	143.459	-4.429	-2.333	1.00	0.00
ATOM 312	CA	VAL A	26	143.882	-4.131	-3.695	1.00	0.00
ATOM 313	C	VAL A	26	143.519	-5.267	-4.644	1.00	0.00
ATOM 314	O	VAL A	26	143.657	-6.442	-4.305	1.00	0.00
ATOM 315	CB	VAL A	26	145.400	-3.881	-3.770	1.00	0.00
ATOM 316	CG1	VAL A	26	145.791	-3.373	-5.149	1.00	0.00
ATOM 317	CG2	VAL A	26	145.833	-2.901	-2.690	1.00	0.00
ATOM 318	H	VAL A	26	143.925	-5.129	-1.829	1.00	0.00
ATOM 319	HA	VAL A	26	143.374	-3.233	-4.014	1.00	0.00
ATOM 320	HB	VAL A	26	145.908	-4.819	-3.600	1.00	0.00
ATOM 321	1HG1	VAL A	26	145.889	-2.297	-5.123	1.00	0.00
ATOM 322	2HG1	VAL A	26	145.030	-3.648	-5.864	1.00	0.00
ATOM 323	3HG1	VAL A	26	146.734	-3.812	-5.440	1.00	0.00
ATOM 324	1HG2	VAL A	26	145.367	-3.169	-1.753	1.00	0.00
ATOM 325	2HG2	VAL A	26	145.533	-1.902	-2.968	1.00	0.00
ATOM 326	3HG2	VAL A	26	146.907	-2.938	-2.582	1.00	0.00
ATOM 327	N	LYS A	27	143.052	-4.909	-5.837	1.00	0.00
ATOM 328	CA	LYS A	27	142.669	-5.900	-6.836	1.00	0.00
ATOM 329	C	LYS A	27	143.868	-6.308	-7.685	1.00	0.00

ATOM 330	O	LYS A	27	144.189	-5.657	-8.680	1.00	0.00
ATOM 331	CB	LYS A	27	141.557	-5.347	-7.731	1.00	0.00
ATOM 332	CG	LYS A	27	140.454	-6.352	-8.020	1.00	0.00
ATOM 333	CD	LYS A	27	139.652	-6.674	-6.770	1.00	0.00
ATOM 334	CE	LYS A	27	138.931	-5.445	-6.239	1.00	0.00
ATOM 335	NZ	LYS A	27	139.738	-4.727	-5.213	1.00	0.00
ATOM 336	H	LYS A	27	142.964	-3.957	-6.049	1.00	0.00
ATOM 337	HA	LYS A	27	142.299	-6.770	-6.315	1.00	0.00
ATOM 338	1HB	LYS A	27	141.115	-4.489	-7.248	1.00	0.00
ATOM 339	2HB	LYS A	27	141.988	-5.037	-8.672	1.00	0.00
ATOM 340	1HG	LYS A	27	139.790	-5.939	-8.765	1.00	0.00
ATOM 341	2HG	LYS A	27	140.898	-7.262	-8.397	1.00	0.00
ATOM 342	1HD	LYS A	27	138.922	-7.433	-7.007	1.00	0.00
ATOM 343	2HD	LYS A	27	140.324	-7.043	-6.008	1.00	0.00
ATOM 344	1HE	LYS A	27	138.735	-4.775	-7.063	1.00	0.00
ATOM 345	2HE	LYS A	27	137.996	-5.755	-5.797	1.00	0.00
ATOM 346	1HZ	LYS A	27	140.748	-4.947	-5.335	1.00	0.00
ATOM 347	2HZ	LYS A	27	139.443	-5.018	-4.260	1.00	0.00
ATOM 348	3HZ	LYS A	27	139.603	-3.701	-5.308	1.00	0.00
ATOM 349	N	GLU A	28	144.529	-7.390	-7.286	1.00	0.00
ATOM 350	CA	GLU A	28	145.694	-7.886	-8.010	1.00	0.00
ATOM 351	C	GLU A	28	145.709	-9.411	-8.036	1.00	0.00
ATOM 352	O	GLU A	28	144.797	-10.059	-7.525	1.00	0.00
ATOM 353	CB	GLU A	28	146.980	-7.360	-7.368	1.00	0.00
ATOM 354	CG	GLU A	28	147.981	-6.812	-8.372	1.00	0.00
ATOM 355	CD	GLU A	28	149.350	-6.580	-7.762	1.00	0.00
ATOM 356	OE1	GLU A	28	149.538	-5.534	-7.106	1.00	0.00
ATOM 357	OE2	GLU A	28	150.233	-7.446	-7.941	1.00	0.00
ATOM 358	H	GLU A	28	144.225	-7.867	-6.485	1.00	0.00

ATOM 359	HA	GLU A	28	145.633	-7.520	-9.024	1.00	0.00
ATOM 360	1HB	GLU A	28	146.727	-6.570	-6.677	1.00	0.00
ATOM 361	2HB	GLU A	28	147.453	-8.164	-6.824	1.00	0.00
ATOM 362	1HG	GLU A	28	148.080	-7.517	-9.183	1.00	0.00
ATOM 363	2HG	GLU A	28	147.609	-5.873	-8.755	1.00	0.00
ATOM 364	N	ASN A	29	146.752	-9.977	-8.635	1.00	0.00
ATOM 365	CA	ASN A	29	146.886	-11.426	-8.726	1.00	0.00
ATOM 366	C	ASN A	29	146.958	-12.052	-7.335	1.00	0.00
ATOM 367	O	ASN A	29	146.123	-12.880	-6.974	1.00	0.00
ATOM 368	CB	ASN A	29	148.133	-11.794	-9.533	1.00	0.00
ATOM 369	CG	ASN A	29	147.812	-12.105	-10.982	1.00	0.00
ATOM 370	OD1	ASN A	29	147.758	-13.268	-11.382	1.00	0.00
ATOM 371	ND2	ASN A	29	147.598	-11.063	-11.777	1.00	0.00
ATOM 372	H	ASN A	29	147.448	-9.407	-9.023	1.00	0.00
ATOM 373	HA	ASN A	29	146.013	-11.808	-9.235	1.00	0.00
ATOM 374	1HB	ASN A	29	148.828	-10.969	-9.507	1.00	0.00
ATOM 375	2HB	ASN A	29	148.597	-12.664	-9.092	1.00	0.00
ATOM 376	1HD2	ASN A	29	147.658	-10.166	-11.389	1.00	0.00
ATOM 377	2HD2	ASN A	29	147.388	-11.235	-12.719	1.00	0.00
ATOM 378	N	PRO A	30	147.964	-11.661	-6.533	1.00	0.00
ATOM 379	CA	PRO A	30	148.142	-12.186	-5.177	1.00	0.00
ATOM 380	C	PRO A	30	147.167	-11.559	-4.180	1.00	0.00
ATOM 381	O	PRO A	30	147.291	-10.383	-3.839	1.00	0.00
ATOM 382	CB	PRO A	30	149.577	-11.785	-4.840	1.00	0.00
ATOM 383	CG	PRO A	30	149.809	-10.537	-5.617	1.00	0.00
ATOM 384	CD	PRO A	30	149.006	-10.676	-6.885	1.00	0.00
ATOM 385	HA	PRO A	30	148.048	-13.261	-5.151	1.00	0.00
ATOM 386	1HB	PRO A	30	149.666	-11.614	-3.777	1.00	0.00
ATOM 387	2HB	PRO A	30	150.254	-12.571	-5.143	1.00	0.00

ATOM 388	1HG	PRO A	30	149.468	-9.684	-5.050	1.00	0.00
ATOM 389	2HG	PRO A	30	150.859	-10.438	-5.849	1.00	0.00
ATOM 390	1HD	PRO A	30	148.564	-9.730	-7.156	1.00	0.00
ATOM 391	2HD	PRO A	30	149.628	-11.045	-7.685	1.00	0.00
ATOM 392	N	PRO A	31	146.181	-12.338	-3.697	1.00	0.00
ATOM 393	CA	PRO A	31	145.190	-11.843	-2.736	1.00	0.00
ATOM 394	C	PRO A	31	145.794	-11.586	-1.360	1.00	0.00
ATOM 395	O	PRO A	31	146.067	-12.521	-0.606	1.00	0.00
ATOM 396	CB	PRO A	31	144.165	-12.976	-2.667	1.00	0.00.
ATOM 397	CG	PRO A	31	144.925	-14.198	-3.043	1.00	0.00
ATOM 398	CD	PRO A	31	145.955	-13.754	-4.044	1.00	0.00
ATOM 399	HA	PRO A	31	144.712	-10.941	-3.091	1.00	0.00
ATOM 400	1HB	PRO A	31	143.770	-13.047	-1.663	1.00	0.00
ATOM 401	2HB	PRO A	31	143.361	-12.782	-3.362	1.00	0.00
ATOM 402	1HG	PRO A	31	145.408	-14.615	-2.170	1.00	0.00
ATOM 403	2HG	PRO A	31	144.260	-14.924	-3.487	1.00	0.00
ATOM 404	1HD	PRO A	31	146.863	-14.327	-3.934	1.00	0.00
ATOM 405	2HD	PRO A	31	145.569	-13.846	-5.048	1.00	0.00
ATOM 406	N	PHE A	32	146.001	-10.313	-1.038	1.00	0.00
ATOM 407	CA	PHE A	32	146.574	-9.933	0.248	1.00	0.00
ATOM 408	C	PHE A	32	145.715	-8.877	0.935	1.00	0.00
ATOM 409	O	PHE A	32	144.802	-8.315	0.330	1.00	0.00
ATOM 410	CB	PHE A	32	147.998	-9.406	0.061	1.00	0.00
ATOM 411	CG	PHE A	32	148.118	-8.373	-1.023	1.00	0.00
ATOM 412	CD1	PHE A	32	148.820	-8.648	-2.186	1.00	0.00
ATOM 413	CD2	PHE A	32	147.530	-7.127	-0.877	1.00	0.00
ATOM 414	CE1	PHE A	32	148.933	-7.700	-3.184	1.00	0.00
ATOM 415	CE2	PHE A	32	147.641	-6.173	-1.873	1.00	0.00
ATOM 416	CZ	PHE A	32	148.342	-6.460	-3.028	1.00	0.00

ATOM 417	H	PHE A	32	145.764	-9.613	-1.680	1.00	0.00
ATOM 418	HA	PHE A	32	146.606	-10.815	0.870	1.00	0.00
ATOM 419	1HB	PHE A	32	148.333	-8.959	0.985	1.00	0.00
ATOM 420	2HB	PHE A	32	148.649	-10.231	-0.190	1.00	0.00
ATOM 421	HD1	PHE A	32	149.281	-9.617	-2.308	1.00	0.00
ATOM 422	HD2	PHE A	32	146.982	-6.901	0.025	1.00	0.00
ATOM 423	HE1	PHE A	32	149.483	-7.927	-4.086	1.00	0.00
ATOM 424	HE2	PHE A	32	147.178	-5.206	-1.748	1.00	0.00
ATOM 425	HZ	PHE A	32	148.429	-5.718	-3.807	1.00	0.00
ATOM 426	N	TYR A	33	146.012	-8.612	2.203	1.00	0.00
ATOM 427	CA	TYR A	33	145.266	-7.623	2.973	1.00	0.00
ATOM 428	C	TYR A	33	146.213	-6.681	3.708	1.00	0.00
ATOM 429	O	TYR A	33	147.222	-7.110	4.269	1.00	0.00
ATOM 430	CB	TYR A	33	144.340	-8.318	3.973	1.00	0.00
ATOM 431	CG	TYR A	33	143.079	-8.869	3.348	1.00	0.00
ATOM 432	CD1	TYR A	33	142.709	-10.196	3.538	1.00	0.00
ATOM 433	CD2	TYR A	33	142.257	-8.064	2.568	1.00	0.00
ATOM 434	CE1	TYR A	33	141.557	-10.703	2.969	1.00	0.00
ATOM 435	CE2	TYR A	33	141.103	-8.566	1.996	1.00	0.00
ATOM 436	CZ	TYR A	33	140.758	-9.885	2.199	1.00	0.00
ATOM 437	OH	TYR A	33	139.610	-10.387	1.630	1.00	0.00
ATOM 438	H	TYR A	33	146.751	-9.094	2.631	1.00	0.00
ATOM 439	HA	TYR A	33	144.669	-7.047	2.282	1.00	0.00
ATOM 440	1HB	TYR A	33	144.869	-9.139	4.432	1.00	0.00
ATOM 441	2HB	TYR A	33	144.051	-7.610	4.736	1.00	0.00
ATOM 442	HD1	TYR A	33	143.337	-10.833	4.141	1.00	0.00
ATOM 443	HD2	TYR A	33	142.531	-7.032	2.411	1.00	0.00
ATOM 444	HE1	TYR A	33	141.286	-11.737	3.127	1.00	0.00
ATOM 445	HE2	TYR A	33	140.477	-7.924	1.393	1.00	0.00

ATOM 446	HH	TYR A	33	139.802	-11.228	1.209	1.00	0.00
ATOM 447	N	GLY A	34	145.881	-5.394	3.704	1.00	0.00
ATOM 448	CA	GLY A	34	146.711	-4.411	4.374	1.00	0.00
ATOM 449	C	GLY A	34	145.948	-3.149	4.725	1.00	0.00
ATOM 450	O	GLY A	34	144.896	-2.873	4.150	1.00	0.00
ATOM 451	H	GLY A	34	145.066	-5.109	3.241	1.00	0.00
ATOM 452	1HA	GLY A	34	147.103	-4.846	5.282	1.00	0.00
ATOM 453	2HA	GLY A	34	147.537	-4.151	3.727	1.00	0.00
ATOM 454	N	VAL A	35	146.480	-2.382	5.671	1.00	0.00
ATOM 455	CA	VAL A	35	145.842	-1.143	6.098	1.00	0.00
ATOM 456	C	VAL A	35	146.536	0.070	5.486	1.00	0.00
ATOM 457	O	VAL A	35	147.743	0.052	5.247	1.00	0.00
ATOM 458	CB	VAL A	35	145.848	-1.009	7.635	1.00	0.00
ATOM 459	CG1	VAL A	35	147.273	-0.996	8.169	1.00	0.00
ATOM 460	CG2	VAL A	35	145.095	0.240	8.067	1.00	0.00
ATOM 461	H	VAL A	35	147.322	-2.656	6.092	1.00	0.00
ATOM 462	HA	VAL A	35	144.816	-1.165	5.763	1.00	0.00
ATOM 463	HB	VAL A	35	145.342	-1.869	8.050	1.00	0.00
ATOM 464	1HG1	VAL A	35	147.344	-0.295	8.987	1.00	0.00
ATOM 465	2HG1	VAL A	35	147.950	-0.699	7.381	1.00	0.00
ATOM 466	3HG1	VAL A	35	147.536	-1.984	8.516	1.00	0.00
ATOM 467	1HG2	VAL A	35	145.576	1.113	7.652	1.00	0.00
ATOM 468	2HG2	VAL A	35	145.096	0.307	9.145	1.00	0.00
ATOM 469	3HG2	VAL A	35	144.076	0.188	7.712	1.00	0.00
ATOM 470	N	ILE A	36	145.764	1.122	5.233	1.00	0.00
ATOM 471	CA	ILE A	36	146.305	2.343	4.648	1.00	0.00
ATOM 472	C	ILE A	36	147.257	3.039	5.615	1.00	0.00
ATOM 473	O	ILE A	36	147.061	3.001	6.830	1.00	0.00
ATOM 474	CB	ILE A	36	145.182	3.324	4.253	1.00	0.00

ATOM 475	CG1	ILE A	36	144.129	2.611	3.400	1.00	0.00
ATOM 476	CG2	ILE A	36	145.758	4.516	3.505	1.00	0.00
ATOM 477	CD1	ILE A	36	142.990	3.510	2.971	1.00	0.00
ATOM 478	H	ILE A	36	144.808	1.075	5.445	1.00	0.00
ATOM 479	HA	ILE A	36	146.848	2.073	3.754	1.00	0.00
ATOM 480	HB	ILE A	36	144.717	3.687	5.157	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.599	2.224	2.509	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.711	1.791	3.967	1.00	0.00
ATOM 483	1HG2	ILE A	36	146.253	5.174	4.204	1.00	0.00
ATOM 484	2HG2	ILE A	36	144.960	5.051	3.011	1.00	0.00
ATOM 485	3HG2	ILE A	36	146.469	4.172	2.770	1.00	0.00
ATOM 486	1HD1	ILE A	36	142.253	3.558	3.759	1.00	0.00
ATOM 487	2HD1	ILE A	36	142.535	3.111	2.076	1.00	0.00
ATOM 488	3HD1	ILE A	36	143.369	4.500	2.772	1.00	0.00
ATOM 489	N	ARG A	37	148.287	3.674	5.067	1.00	0.00
ATOM 490	CA	ARG A	37	149.271	4.379	5.882	1.00	0.00
ATOM 491	C	ARG A	37	149.476	5.804	5.378	1.00	0.00
ATOM 492	O	ARG A	37	149.174	6.769	6.080	1.00	0.00
ATOM 493	CB	ARG A	37	150.604	3.626	5.872	1.00	0.00
ATOM 494	CG	ARG A	37	150.463	2.137	6.139	1.00	0.00
ATOM 495	CD	ARG A	37	149.863	1.870	7.511	1.00	0.00
ATOM 496	NE	ARG A	37	150.865	1.945	8.571	1.00	0.00
ATOM 497	CZ	ARG A	37	150.616	1.661	9.847	1.00	0.00
ATOM 498	NH1	ARG A	37	149.401	1.284	10.226	1.00	0.00
ATOM 499	NH2	ARG A	37	151.585	1.755	10.749	1.00	0.00
ATOM 500	H	ARG A	37	148.389	3.668	4.093	1.00	0.00
ATOM 501	HA	ARG A	37	148.897	4.418	6.893	1.00	0.00
ATOM 502	1HB	ARG A	37	151.069	3.754	4.907	1.00	0.00
ATOM 503	2HB	ARG A	37	151.247	4.047	6.632	1.00	0.00

ATOM 504	1HG	ARG	A	37	149.820	1.705	5.386	1.00	0.00
ATOM 505	2HG	ARG	A	37	151.440	1.678	6.088	1.00	0.00
ATOM 506	1HD	ARG	A	37	149.095	2.605	7.702	1.00	0.00
ATOM 507	2HD	ARG	A	37	149.424	0.883	7.511	1.00	0.00
ATOM 508	HE	ARG	A	37	151.770	2.221	8.319	1.00	0.00
ATOM 509	1HH1	ARG	A	37	148.667	1.211	9.551	1.00	0.00
ATOM 510	2HH1	ARG	A	37	149.221	1.071	11.187	1.00	0.00
ATOM 511	1HH2	ARG	A	37	152.502	2.039	10.469	1.00	0.00
ATOM 512	2HH2	ARG	A	37	151.398	1.542	11.707	1.00	0.00
ATOM 513	N	TRP	A	38	149.989	5.929	4.158	1.00	0.00
ATOM 514	CA	TRP	A	38	150.233	7.238	3.563	1.00	0.00
ATOM 515	C	TRP	A	38	149.491	7.382	2.237	1.00	0.00
ATOM 516	O	TRP	A	38	149.514	6.481	1.399	1.00	0.00
ATOM 517	CB	TRP	A	38	151.735	7.456	3.349	1.00	0.00
ATOM 518	CG	TRP	A	38	152.054	8.673	2.533	1.00	0.00
ATOM 519	CD1	TRP	A	38	152.277	9.938	2.997	1.00	0.00
ATOM 520	CD2	TRP	A	38	152.180	8.741	1.107	1.00	0.00
ATOM 521	NE1	TRP	A	38	152.534	10.787	1.947	1.00	0.00
ATOM 522	CE2	TRP	A	38	152.480	10.075	0.777	1.00	0.00
ATOM 523	CE3	TRP	A	38	152.068	7.801	0.079	1.00	0.00
ATOM 524	CZ2	TRP	A	38	152.669	10.492	-0.540	1.00	0.00
ATOM 525	CZ3	TRP	A	38	152.256	8.216	-1.226	1.00	0.00
ATOM 526	CH2	TRP	A	38	152.554	9.551	-1.526	1.00	0.00
ATOM 527	H	TRP	A	38	150.208	5.122	3.646	1.00	0.00
ATOM 528	HA	TRP	A	38	149.865	7.987	4.249	1.00	0.00
ATOM 529	1HB	TRP	A	38	152.215	7.565	4.310	1.00	0.00
ATOM 530	2HB	TRP	A	38	152.147	6.595	2.842	1.00	0.00
ATOM 531	HD1	TRP	A	38	152.251	10.216	4.039	1.00	0.00
ATOM 532	HE1	TRP	A	38	152.725	11.746	2.023	1.00	0.00



ATOM 533	HE3	TRP A	38	151.838	6.769	0.289	1.00	0.00
ATOM 534	HZ2	TRP A	38	152.896	11.518	-0.788	1.00	0.00
ATOM 535	HZ3	TRP A	38	152.173	7.503	-2.034	1.00	0.00
ATOM 536	HH2	TRP A	38	152.693	9.829	-2.560	1.00	0.00
ATOM 537	N	ILE A	39	148.842	8.527	2.055	1.00	0.00
ATOM 538	CA	ILE A	39	148.100	8.803	0.831	1.00	0.00
ATOM 539	C	ILE A	39	148.544	10.127	0.223	1.00	0.00
ATOM 540	O	ILE A	39	148.213	11.197	0.735	1.00	0.00
ATOM 541	CB	ILE A	39	146.583	8.851	1.090	1.00	0.00
ATOM 542	CG1	ILE A	39	146.137	7.619	1.880	1.00	0.00
ATOM 543	CG2	ILE A	39	145.824	8.946	-0.225	1.00	0.00
ATOM 544	CD1	ILE A	39	144.728	7.725	2.420	1.00	0.00
ATOM 545	H	ILE A	39	148.868	9.207	2.760	1.00	0.00
ATOM 546	HA	ILE A	39	148.302	8.007	0.129	1.00	0.00
ATOM 547	HB	ILE A	39	146.366	9.737	1.667	1.00	0.00
ATOM 548	1HG1	ILE A	39	146.182	6.752	1.239	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.804	7.476	2.717	1.00	0.00
ATOM 550	1HG2	ILE A	39	146.045	8.080	-0.832	1.00	0.00
ATOM 551	2HG2	ILE A	39	146.125	9.840	-0.752	1.00	0.00
ATOM 552	3HG2	ILE A	39	144.763	8.986	-0.028	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.041	7.263	1.727	1.00	0.00
ATOM 554	2HD1	ILE A	39	144.468	8.765	2.547	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.669	7.221	3.374	1.00	0.00
ATOM 556	N	GLY A	40	149.303	10.051	-0.866	1.00	0.00
ATOM 557	CA	GLY A	40	149.784	11.256	-1.513	1.00	0.00
ATOM 558	C	GLY A	40	150.325	11.000	-2.905	1.00	0.00
ATOM 559	O	GLY A	40	150.197	9.896	-3.437	1.00	0.00
ATOM 560	H	GLY A	40	149.542	9.172	-1.228	1.00	0.00
ATOM 561	1HA	GLY A	40	148.973	11.963	-1.580	1.00	0.00

ATOM 562	2HA	GLY A	40	150.569	11.684	-0.909	1.00	0.00
ATOM 563	N	GLN A	41	150.931	12.024	-3.494	1.00	0.00
ATOM 564	CA	GLN A	41	151.497	11.918	-4.833	1.00	0.00
ATOM 565	C	GLN A	41	152.964	12.346	-4.832	1.00	0.00
ATOM 566	O	GLN A	41	153.276	13.509	-4.574	1.00	0.00
ATOM 567	CB	GLN A	41	150.698	12.783	-5.807	1.00	0.00
ATOM 568	CG	GLN A	41	149.196	12.573	-5.716	1.00	0.00
ATOM 569	CD	GLN A	41	148.417	13.867	-5.845	1.00	0.00
ATOM 570	OE1	GLN A	41	148.369	14.671	-4.914	1.00	0.00
ATOM 571	NE2	GLN A	41	147.802	14.074	-7.002	1.00	0.00
ATOM 572	H	GLN A	41	150.998	12.876	-3.016	1.00	0.00
ATOM 573	HA	GLN A	41	151.430	10.886	-5.142	1.00	0.00
ATOM 574	1HB	GLN A	41	150.906	13.822	-5.600	1.00	0.00
ATOM 575	2HB	GLN A	41	151.013	12.556	-6.814	1.00	0.00
ATOM 576	1HG	GLN A	41	148.889	11.906	-6.508	1.00	0.00
ATOM 577	2HG	GLN A	41	148.965	12.125	-4.761	1.00	0.00
ATOM 578	1HE2	GLN A	41	147.884	13.389	-7.698	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.291	14.902	-7.114	1.00	0.00
ATOM 580	N	PRO A	42	153.889	11.412	-5.117	1.00	0.00
ATOM 581	CA	PRO A	42	155.326	11.708	-5.142	1.00	0.00
ATOM 582	C	PRO A	42	155.671	12.825	-6.122	1.00	0.00
ATOM 583	O	PRO A	42	154.902	13.119	-7.038	1.00	0.00
ATOM 584	CB	PRO A	42	155.961	10.387	-5.590	1.00	0.00
ATOM 585	CG	PRO A	42	154.953	9.346	-5.249	1.00	0.00
ATOM 586	CD	PRO A	42	153.614	10.000	-5.435	1.00	0.00
ATOM 587	HA	PRO A	42	155.691	11.970	-4.160	1.00	0.00
ATOM 588	1HB	PRO A	42	156.152	10.420	-6.653	1.00	0.00
ATOM 589	2HB	PRO A	42	156.886	10.230	-5.057	1.00	0.00
ATOM 590	1HG	PRO A	42	155.054	8.501	-5.913	1.00	0.00

ATOM 591	2HG	PRO A	42	155.078	9.034	-4.222	1.00	0.00
ATOM 592	1HD	PRO A	42	153.280	9.891	-6.457	1.00	0.00
ATOM 593	2HD	PRO A	42	152.891	9.583	-4.751	1.00	0.00
ATOM 594	N	PRO A	43	156.841	13.463	-5.943	1.00	0.00
ATOM 595	CA	PRO A	43	157.286	14.551	-6.816	1.00	0.00
ATOM 596	C	PRO A	43	157.707	14.053	-8.193	1.00	0.00
ATOM 597	O	PRO A	43	158.879	13.762	-8.429	1.00	0.00
ATOM 598	CB	PRO A	43	158.488	15.132	-6.072	1.00	0.00
ATOM 599	CG	PRO A	43	159.013	14.001	-5.259	1.00	0.00
ATOM 600	CD	PRO A	43	157.817	13.173	-4.876	1.00	0.00
ATOM 601	HA	PRO A	43	156.525	15.310	-6.925	1.00	0.00
ATOM 602	1HB	PRO A	43	159.220	15.481	-6.786	1.00	0.00
ATOM 603	2HB	PRO A	43	158.167	15.952	-5.447	1.00	0.00
ATOM 604	1HG	PRO A	43	159.702	13.414	-5.848	1.00	0.00
ATOM 605	2HG	PRO A	43	159.504	14.381	-4.375	1.00	0.00
ATOM 606	1HD	PRO A	43	158.074	12.124	-4.864	1.00	0.00
ATOM 607	2HD	PRO A	43	157.438	13.479	-3.913	1.00	0.00
ATOM 608	N	GLY A	44	156.742	13.956	-9.102	1.00	0.00
ATOM 609	CA	GLY A	44	157.035	13.493	-10.444	1.00	0.00
ATOM 610	C	GLY A	44	155.815	12.935	-11.146	1.00	0.00
ATOM 611	O	GLY A	44	155.511	13.319	-12.275	1.00	0.00
ATOM 612	H	GLY A	44	155.826	14.202	-8.859	1.00	0.00
ATOM 613	1HA	GLY A	44	157.422	14.318	-11.021	1.00	0.00
ATOM 614	2HA	GLY A	44	157.789	12.721	-10.389	1.00	0.00
ATOM 615	N	LEU A	45	155.112	12.028	-10.476	1.00	0.00
ATOM 616	CA	LEU A	45	153.916	11.419	-11.047	1.00	0.00
ATOM 617	C	LEU A	45	152.704	11.673	-10.162	1.00	0.00
ATOM 618	O	LEU A	45	152.622	11.161	-9.045	1.00	0.00
ATOM 619	CB	LEU A	45	154.123	9.914	-11.228	1.00	0.00

ATOM 620	CG	LEU A	45	154.702	9.190	-10.012	1.00	0.00
ATOM 621	CD1	LEU A	45	154.398	7.699	-10.079	1.00	0.00
ATOM 622	CD2	LEU A	45	156.202	9.431	-9.913	1.00	0.00
ATOM 623	H	LEU A	45	155.402	11.763	-9.577	1.00	0.00
ATOM 624	HA	LEU A	45	153.744	11.868	-12.013	1.00	0.00
ATOM 625	1HB	LEU A	45	153.168	9.467	-11.467	1.00	0.00
ATOM 626	2HB	LEU A	45	154.792	9.761	-12.061	1.00	0.00
ATOM 627	HG	LEU A	45	154.240	9.583	-9.116	1.00	0.00
ATOM 628	1HD1	LEU A	45	153.895	7.394	-9.174	1.00	0.00
ATOM 629	2HD1	LEU A	45	155.321	7.147	-10.182	1.00	0.00
ATOM 630	3HD1	LEU A	45	153.763	7.498	-10.930	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.405	10.107	-9.095	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.558	9.867	-10.836	1.00	0.00
ATOM 633	3HD2	LEU A	45	156.709	8.493	-9.739	1.00	0.00
ATOM 634	N	ASN A	46	151.760	12.464	-10.662	1.00	0.00
ATOM 635	CA	ASN A	46	150.556	12.771	-9.903	1.00	0.00
ATOM 636	C	ASN A	46	149.628	11.563	-9.860	1.00	0.00
ATOM 637	O	ASN A	46	149.007	11.207	-10.861	1.00	0.00
ATOM 638	CB	ASN A	46	149.829	13.967	-10.521	1.00	0.00
ATOM 639	CG	ASN A	46	148.973	14.709	-9.514	1.00	0.00
ATOM 640	OD1	ASN A	46	147.746	14.622	-9.540	1.00	0.00
ATOM 641	ND2	ASN A	46	149.619	15.445	-8.617	1.00	0.00
ATOM 642	H	ASN A	46	151.875	12.844	-11.558	1.00	0.00
ATOM 643	HA	ASN A	46	150.852	13.021	-8.895	1.00	0.00
ATOM 644	1HB	ASN A	46	150.557	14.655	-10.922	1.00	0.00
ATOM 645	2HB	ASN A	46	149.191	13.619	-11.320	1.00	0.00
ATOM 646	1HD2	ASN A	46	150.599	15.468	-8.655	1.00	0.00
ATOM 647	2HD2	ASN A	46	149.091	15.936	-7.953	1.00	0.00
ATOM 648	N	GLU A	47	149.543	10.935	-8.693	1.00	0.00

ATOM 649	CA	GLU A	47	148.693	9.766	-8.511	1.00	0.00
ATOM 650	C	GLU A	47	148.523	9.444	-7.031	1.00	0.00
ATOM 651	O	GLU A	47	149.502	9.193	-6.327	1.00	0.00
ATOM 652	CB	GLU A	47	149.286	8.558	-9.243	1.00	0.00
ATOM 653	CG	GLU A	47	150.801	8.468	-9.150	1.00	0.00
ATOM 654	CD	GLU A	47	151.389	7.499	-10.156	1.00	0.00
ATOM 655	OE1	GLU A	47	151.498	7.871	-11.345	1.00	0.00
ATOM 656	OE2	GLU A	47	151.742	6.370	-9.757	1.00	0.00
ATOM 657	H	GLU A	47	150.064	11.268	-7.933	1.00	0.00
ATOM 658	HA	GLU A	47	147.725	9.991	-8.932	1.00	0.00
ATOM 659	1HB	GLU A	47	148.866	7.656	-8.820	1.00	0.00
ATOM 660	2HB	GLU A	47	149.014	8.615	-10.286	1.00	0.00
ATOM 661	1HG	GLU A	47	151.218	9.446	-9.329	1.00	0.00
ATOM 662	2HG	GLU A	47	151.070	8.140	-8.157	1.00	0.00
ATOM 663	N	VAL A	48	147.281	9.445	-6.564	1.00	0.00
ATOM 664	CA	VAL A	48	146.998	9.146	-5.167	1.00	0.00
ATOM 665	C	VAL A	48	147.382	7.708	-4.839	1.00	0.00
ATOM 666	O	VAL A	48	146.654	6.771	-5.164	1.00	0.00
ATOM 667	CB	VAL A	48	145.510	9.358	-4.832	1.00	0.00
ATOM 668	CG1	VAL A	48	145.280	9.261	-3.332	1.00	0.00
ATOM 669	CG2	VAL A	48	145.028	10.698	-5.367	1.00	0.00
ATOM 670	H	VAL A	48	146.539	9.647	-7.171	1.00	0.00
ATOM 671	HA	VAL A	48	147.586	9.814	-4.555	1.00	0.00
ATOM 672	HB	VAL A	48	144.938	8.577	-5.311	1.00	0.00
ATOM 673	1HG1	VAL A	48	146.009	9.870	-2.816	1.00	0.00
ATOM 674	2HG1	VAL A	48	145.384	8.234	-3.018	1.00	0.00
ATOM 675	3HG1	VAL A	48	144.286	9.612	-3.096	1.00	0.00
ATOM 676	1HG2	VAL A	48	144.888	10.631	-6.435	1.00	0.00
ATOM 677	2HG2	VAL A	48	145.764	11.458	-5.149	1.00	0.00

ATOM 678	3HG2	VAL	A	48	144.092	10.958	-4.896	1.00	0.00
ATOM 679	N	LEU	A	49	148.535	7.539	-4.201	1.00	0.00
ATOM 680	CA	LEU	A	49	149.018	6.214	-3.836	1.00	0.00
ATOM 681	C	LEU	A	49	148.878	5.981	-2.338	1.00	0.00
ATOM 682	O	LEU	A	49	149.538	6.638	-1.532	1.00	0.00
ATOM 683	CB	LEU	A	49	150.480	6.046	-4.256	1.00	0.00
ATOM 684	CG	LEU	A	49	150.733	6.129	-5.763	1.00	0.00
ATOM 685	CD1	LEU	A	49	152.125	6.676	-6.041	1.00	0.00
ATOM 686	CD2	LEU	A	49	150.556	4.763	-6.408	1.00	0.00
ATOM 687	H	LEU	A	49	149.075	8.325	-3.971	1.00	0.00
ATOM 688	HA	LEU	A	49	148.417	5.486	-4.360	1.00	0.00
ATOM 689	1HB	LEU	A	49	151.062	6.815	-3.771	1.00	0.00
ATOM 690	2HB	LEU	A	49	150.824	5.084	-3.910	1.00	0.00
ATOM 691	HG	LEU	A	49	150.016	6.805	-6.206	1.00	0.00
ATOM 692	1HD1	LEU	A	49	152.859	6.065	-5.535	1.00	0.00
ATOM 693	2HD1	LEU	A	49	152.192	7.691	-5.679	1.00	0.00
ATOM 694	3HD1	LEU	A	49	152.313	6.658	-7.104	1.00	0.00
ATOM 695	1HD2	LEU	A	49	151.466	4.192	-6.299	1.00	0.00
ATOM 696	2HD2	LEU	A	49	150.332	4.887	-7.458	1.00	0.00
ATOM 697	3HD2	LEU	A	49	149.744	4.241	-5.927	1.00	0.00
ATOM 698	N	ALA	A	50	148.016	5.041	-1.969	1.00	0.00
ATOM 699	CA	ALA	A	50	147.792	4.725	-0.567	1.00	0.00
ATOM 700	C	ALA	A	50	148.710	3.597	-0.106	1.00	0.00
ATOM 701	O	ALA	A	50	148.601	2.465	-0.577	1.00	0.00
ATOM 702	CB	ALA	A	50	146.334	4.353	-0.335	1.00	0.00
ATOM 703	H	ALA	A	50	147.518	4.551	-2.657	1.00	0.00
ATOM 704	HA	ALA	A	50	148.009	5.613	0.009	1.00	0.00
ATOM 705	1HB	ALA	A	50	145.791	5.222	0.005	1.00	0.00
ATOM 706	2HB	ALA	A	50	146.275	3.576	0.412	1.00	0.00

ATOM 707	3HB	ALA A	50	145.903	3.997	-1.259	1.00	0.00
ATOM 708	N	GLY A	51	149.612	3.914	0.815	1.00	0.00
ATOM 709	CA	GLY A	51	150.535	2.916	1.323	1.00	0.00
ATOM 710	C	GLY A	51	149.844	1.863	2.167	1.00	0.00
ATOM 711	O	GLY A	51	149.329	2.161	3.245	1.00	0.00
ATOM 712	H	GLY A	51	149.653	4.833	1.153	1.00	0.00
ATOM 713	1HA	GLY A	51	151.018	2.431	0.488	1.00	0.00
ATOM 714	2HA	GLY A	51	151.286	3.408	1.924	1.00	0.00
ATOM 715	N	LEU A	52	149.831	0.629	1.676	1.00	0.00
ATOM 716	CA	LEU A	52	149.197	-0.472	2.394	1.00	0.00
ATOM 717	C	LEU A	52	150.243	-1.373	3.043	1.00	0.00
ATOM 718	O	LEU A	52	151.202	-1.795	2.395	1.00	0.00
ATOM 719	CB	LEU A	52	148.321	-1.291	1.444	1.00	0.00
ATOM 720	CG	LEU A	52	147.056	-0.582	0.958	1.00	0.00
ATOM 721	CD1	LEU A	52	146.413	-1.358	-0.180	1.00	0.00
ATOM 722	CD2	LEU A	52	146.072	-0.402	2.105	1.00	0.00
ATOM 723	H	LEU A	52	150.258	0.452	0.813	1.00	0.00
ATOM 724	HA	LEU A	52	148.576	-0.048	3.168	1.00	0.00
ATOM 725	1HB	LEU A	52	148.914	-1.558	0.582	1.00	0.00
ATOM 726	2HB	LEU A	52	148.025	-2.197	1.951	1.00	0.00
ATOM 727	HG	LEU A	52	147.320	0.398	0.587	1.00	0.00
ATOM 728	1HD1	LEU A	52	147.183	-1.760	-0.823	1.00	0.00
ATOM 729	2HD1	LEU A	52	145.776	-0.698	-0.752	1.00	0.00
ATOM 730	3HD1	LEU A	52	145.822	-2.167	0.223	1.00	0.00
ATOM 731	1HD2	LEU A	52	146.235	-1.174	2.843	1.00	0.00
ATOM 732	2HD2	LEU A	52	145.063	-0.473	1.728	1.00	0.00
ATOM 733	3HD2	LEU A	52	146.220	0.567	2.558	1.00	0.00
ATOM 734	N	GLU A	53	150.052	-1.664	4.326	1.00	0.00
ATOM 735	CA	GLU A	53	150.978	-2.514	5.063	1.00	0.00

ATOM 736	C	GLU A	53	150.455	-3.945	5.146	1.00	0.00
ATOM 737	O	GLU A	53	149.489	-4.223	5.858	1.00	0.00
ATOM 738	CB	GLU A	53	151.204	-1.959	6.470	1.00	0.00
ATOM 739	CG	GLU A	53	152.193	-2.769	7.292	1.00	0.00
ATOM 740	CD	GLU A	53	151.825	-2.820	8.762	1.00	0.00
ATOM 741	OE1	GLU A	53	150.789	-3.436	9.095	1.00	0.00
ATOM 742	OE2	GLU A	53	152.571	-2.244	9.581	1.00	0.00
ATOM 743	H	GLU A	53	149.269	-1.297	4.787	1.00	0.00
ATOM 744	HA	GLU A	53	151.919	-2.519	4.532	1.00	0.00
ATOM 745	1HB	GLU A	53	151.577	-0.949	6.391	1.00	0.00
ATOM 746	2HB	GLU A	53	150.259	-1.944	6.995	1.00	0.00
ATOM 747	1HG	GLU A	53	152.219	-3.779	6.909	1.00	0.00
ATOM 748	2HG	GLU A	53	153.172	-2.323	7.196	1.00	0.00
ATOM 749	N	LEU A	54	151.097	-4.848	4.413	1.00	0.00
ATOM 750	CA	LEU A	54	150.696	-6.250	4.404	1.00	0.00
ATOM 751	C	LEU A	54	150.964	-6.903	5.757	1.00	0.00
ATOM 752	O	LEU A	54	152.037	-6.735	6.335	1.00	0.00
ATOM 753	CB	LEU A	54	151.439	-7.008	3.302	1.00	0.00
ATOM 754	CG	LEU A	54	151.377	-6.362	1.917	1.00	0.00
ATOM 755	CD1	LEU A	54	152.577	-6.778	1.080	1.00	0.00
ATOM 756	CD2	LEU A	54	150.080	-6.734	1.215	1.00	0.00
ATOM 757	H	LEU A	54	151.859	-4.565	3.866	1.00	0.00
ATOM 758	HA	LEU A	54	149.635	-6.290	4.203	1.00	0.00
ATOM 759	1HB	LEU A	54	152.476	-7.094	3.591	1.00	0.00
ATOM 760	2HB	LEU A	54	151.019	-8.000	3.231	1.00	0.00
ATOM 761	HG	LEU A	54	151.404	-5.288	2.026	1.00	0.00
ATOM 762	1HD1	LEU A	54	152.294	-6.815	0.038	1.00	0.00
ATOM 763	2HD1	LEU A	54	152.914	-7.755	1.396	1.00	0.00
ATOM 764	3HD1	LEU A	54	153.373	-6.062	1.212	1.00	0.00



ATOM 765	1HD2	LEU	A	54	150.087	-6.336	0.212	1.00	0.00
ATOM 766	2HD2	LEU	A	54	149.244	-6.321	1.761	1.00	0.00
ATOM 767	3HD2	LEU	A	54	149.988	-7.809	1.175	1.00	0.00
ATOM 768	N	GLU	A	55	149.981	-7.645	6.255	1.00	0.00
ATOM 769	CA	GLU	A	55	150.112	-8.323	7.540	1.00	0.00
ATOM 770	C	GLU	A	55	151.134	-9.452	7.459	1.00	0.00
ATOM 771	O	GLU	A	55	151.849	-9.725	8.422	1.00	0.00
ATOM 772	CB	GLU	A	55	148.758	-8.876	7.988	1.00	0.00
ATOM 773	CG	GLU	A	55	147.661	-7.825	8.049	1.00	0.00
ATOM 774	CD	GLU	A	55	146.606	-8.144	9.089	1.00	0.00
ATOM 775	OE1	GLU	A	55	146.111	-7.202	9.743	1.00	0.00
ATOM 776	OE2	GLU	A	55	146.273	-9.338	9.250	1.00	0.00
ATOM 777	H	GLU	A	55	149.149	-7.740	5.746	1.00	0.00
ATOM 778	HA	GLU	A	55	150.452	-7.597	8.264	1.00	0.00
ATOM 779	1HB	GLU	A	55	148.450	-9.646	7.297	1.00	0.00
ATOM 780	2HB	GLU	A	55	148.867	-9.310	8.971	1.00	0.00
ATOM 781	1HG	GLU	A	55	148.106	-6.873	8.292	1.00	0.00
ATOM 782	2HG	GLU	A	55	147.185	-7.764	7.081	1.00	0.00
ATOM 783	N	ASP	A	56	151.196	-10.104	6.302	1.00	0.00
ATOM 784	CA	ASP	A	56	152.131	-11.204	6.095	1.00	0.00
ATOM 785	C	ASP	A	56	153.441	-10.699	5.500	1.00	0.00
ATOM 786	O	ASP	A	56	153.443	-9.875	4.585	1.00	0.00
ATOM 787	CB	ASP	A	56	151.513	-12.260	5.178	1.00	0.00
ATOM 788	CG	ASP	A	56	151.896	-13.671	5.579	1.00	0.00
ATOM 789	OD1	ASP	A	56	152.482	-14.388	4.741	1.00	0.00
ATOM 790	OD2	ASP	A	56	151.612	-14.057	6.733	1.00	0.00
ATOM 791	H	ASP	A	56	150.601	-9.839	5.571	1.00	0.00
ATOM 792	HA	ASP	A	56	152.336	-11.650	7.057	1.00	0.00
ATOM 793	1HB	ASP	A	56	150.437	-12.175	5.214	1.00	0.00

ATOM 794	2HB	ASP A	56	151.849	-12.090	4.165	1.00	0.00
ATOM 795	N	GLU A	57	154.555	-11.200	6.023	1.00	0.00
ATOM 796	CA	GLU A	57	155.873	-10.799	5.543	1.00	0.00
ATOM 797	C	GLU A	57	156.191	-11.467	4.209	1.00	0.00
ATOM 798	O	GLU A	57	156.569	-12.637	4.163	1.00	0.00
ATOM 799	CB	GLU A	57	156.945	-11.158	6.573	1.00	0.00
ATOM 800	CG	GLU A	57	157.202	-10.058	7.591	1.00	0.00
ATOM 801	CD	GLU A	57	158.675	-9.895	7.913	1.00	0.00
ATOM 802	OE1	GLU A	57	159.507	-10.090	7.002	1.00	0.00
ATOM 803	OE2	GLU A	57	158.996	-9.573	9.076	1.00	0.00
ATOM 804	H	GLU A	57	154.490	-11.854	6.750	1.00	0.00
ATOM 805	HA	GLU A	57	155.864	-9.729	5.403	1.00	0.00
ATOM 806	1HB	GLU A	57	156.635	-12.045	7.106	1.00	0.00
ATOM 807	2HB	GLU A	57	157.871	-11.364	6.057	1.00	0.00
ATOM 808	1HG	GLU A	57	156.832	-9.125	7.194	1.00	0.00
ATOM 809	2HG	GLU A	57	156.673	-10.298	8.502	1.00	0.00
ATOM 810	N	CYS A	58	156.035	-10.715	3.125	1.00	0.00
ATOM 811	CA	CYS A	58	156.305	-11.234	1.789	1.00	0.00
ATOM 812	C	CYS A	58	157.612	-10.668	1.241	1.00	0.00
ATOM 813	O	CYS A	58	157.877	-9.472	1.350	1.00	0.00
ATOM 814	CB	CYS A	58	155.153	-10.892	0.844	1.00	0.00
ATOM 815	SG	CYS A	58	154.828	-12.155	-0.409	1.00	0.00
ATOM 816	H	CYS A	58	155.731	-9.788	3.225	1.00	0.00
ATOM 817	HA	CYS A	58	156.393	-12.307	1.862	1.00	0.00
ATOM 818	1HB	CYS A	58	154.249	-10.764	1.421	1.00	0.00
ATOM 819	2HB	CYS A	58	155.378	-9.970	0.330	1.00	0.00
ATOM 820	HG	CYS A	58	155.382	-11.967	-1.171	1.00	0.00
ATOM 821	N	ALA A	59	158.424	-11.538	0.649	1.00	0.00
ATOM 822	CA	ALA A	59	159.704	-11.127	0.083	1.00	0.00

ATOM 823	C	ALA A	59	159.504	-10.336	-1.206	1.00	0.00
ATOM 824	O	ALA A	59	158.946	-10.845	-2.177	1.00	0.00
ATOM 825	CB	ALA A	59	160.583	-12.342	-0.172	1.00	0.00
ATOM 826	H	ALA A	59	158.157	-12.480	0.592	1.00	0.00
ATOM 827	HA	ALA A	59	160.201	-10.498	0.806	1.00	0.00
ATOM 828	1HB	ALA A	59	160.533	-13.006	0.679	1.00	0.00
ATOM 829	2HB	ALA A	59	161.604	-12.022	-0.319	1.00	0.00
ATOM 830	3HB	ALA A	59	160.235	-12.859	-1.053	1.00	0.00
ATOM 831	N	GLY A	60	159.964	-9.090	-1.206	1.00	0.00
ATOM 832	CA	GLY A	60	159.828	-8.249	-2.381	1.00	0.00
ATOM 833	C	GLY A	60	159.332	-6.857	-2.044	1.00	0.00
ATOM 834	O	GLY A	60	159.634	-5.895	-2.751	1.00	0.00
ATOM 835	H	GLY A	60	160.402	-8.738	-0.403	1.00	0.00
ATOM 836	1HA	GLY A	60	160.789	-8.169	-2.868	1.00	0.00
ATOM 837	2HA	GLY A	60	159.129	-8.713	-3.063	1.00	0.00
ATOM 838	N	CYS A	61	158.569	-6.749	-0.961	1.00	0.00
ATOM 839	CA	CYS A	61	158.030	-5.464	-0.533	1.00	0.00
ATOM 840	C	CYS A	61	159.088	-4.647	0.201	1.00	0.00
ATOM 841	O	CYS A	61	160.199	-5.122	0.439	1.00	0.00
ATOM 842	CB	CYS A	61	156.814	-5.674	0.372	1.00	0.00
ATOM 843	SG	CYS A	61	155.538	-6.739	-0.343	1.00	0.00
ATOM 844	H	CYS A	61	158.363	-7.552	-0.440	1.00	0.00
ATOM 845	HA	CYS A	61	157.721	-4.923	-1.414	1.00	0.00
ATOM 846	1HB	CYS A	61	157.137	-6.126	1.297	1.00	0.00
ATOM 847	2HB	CYS A	61	156.361	-4.716	0.584	1.00	0.00
ATOM 848	HG	CYS A	61	155.374	-6.443	-1.241	1.00	0.00
ATOM 849	N	THR A	62	158.736	-3.416	0.557	1.00	0.00
ATOM 850	CA	THR A	62	159.656	-2.532	1.265	1.00	0.00
ATOM 851	C	THR A	62	159.205	-2.320	2.707	1.00	0.00

ATOM 852	O	THR A	62	158.208	-2.893	3.147	1.00	0.00
ATOM 853	CB	THR A	62	159.755	-1.186	0.546	1.00	0.00
ATOM 854	OG1	THR A	62	158.468	-0.633	0.336	1.00	0.00
ATOM 855	CG2	THR A	62	160.441	-1.276	-0.800	1.00	0.00
ATOM 856	H	THR A	62	157.835	-3.094	0.341	1.00	0.00
ATOM 857	HA	THR A	62	160.628	-3.001	1.270	1.00	0.00
ATOM 858	HB	THR A	62	160.322	-0.502	1.161	1.00	0.00
ATOM 859	HG1	THR A	62	158.158	-0.226	1.149	1.00	0.00
ATOM 860	1HG2	THR A	62	160.407	-2.296	-1.154	1.00	0.00
ATOM 861	2HG2	THR A	62	161.470	-0.963	-0.701	1.00	0.00
ATOM 862	3HG2	THR A	62	159.936	-0.634	-1.506	1.00	0.00
ATOM 863	N	ASP A	63	159.946	-1.492	3.437	1.00	0.00
ATOM 864	CA	ASP A	63	159.622	-1.204	4.830	1.00	0.00
ATOM 865	C	ASP A	63	158.872	0.118	4.951	1.00	0.00
ATOM 866	O	ASP A	63	158.994	0.823	5.953	1.00	0.00
ATOM 867	CB	ASP A	63	160.897	-1.160	5.673	1.00	0.00
ATOM 868	CG	ASP A	63	161.958	-0.260	5.071	1.00	0.00
ATOM 869	OD1	ASP A	63	161.917	0.962	5.329	1.00	0.00
ATOM 870	OD2	ASP A	63	162.830	-0.775	4.341	1.00	0.00
ATOM 871	H	ASP A	63	160.728	-1.066	3.030	1.00	0.00
ATOM 872	HA	ASP A	63	158.988	-1.998	5.194	1.00	0.00
ATOM 873	1HB	ASP A	63	160.658	-0.792	6.659	1.00	0.00
ATOM 874	2HB	ASP A	63	161.302	-2.158	5.755	1.00	0.00
ATOM 875	N	GLY A	64	158.097	0.449	3.923	1.00	0.00
ATOM 876	CA	GLY A	64	157.338	1.687	3.936	1.00	0.00
ATOM 877	C	GLY A	64	158.086	2.832	3.282	1.00	0.00
ATOM 878	O	GLY A	64	158.057	3.960	3.772	1.00	0.00
ATOM 879	H	GLY A	64	158.038	-0.151	3.152	1.00	0.00
ATOM 880	1HA	GLY A	64	156.408	1.532	3.409	1.00	0.00

ATOM 881	2HA	GLY A	64	157.119	1.951	4.959	1.00	0.00
ATOM 882	N	THR A	65	158.759	2.540	2.173	1.00	0.00
ATOM 883	CA	THR A	65	159.518	3.555	1.451	1.00	0.00
ATOM 884	C	THR A	65	159.186	3.527	-0.037	1.00	0.00
ATOM 885	O	THR A	65	159.401	2.520	-0.712	1.00	0.00
ATOM 886	CB	THR A	65	161.018	3.339	1.654	1.00	0.00
ATOM 887	OG1	THR A	65	161.361	1.979	1.450	1.00	0.00
ATOM 888	CG2	THR A	65	161.498	3.730	3.036	1.00	0.00
ATOM 889	H	THR A	65	158.743	1.622	1.832	1.00	0.00
ATOM 890	HA	THR A	65	159.246	4.520	1.851	1.00	0.00
ATOM 891	HB	THR A	65	161.559	3.937	0.935	1.00	0.00
ATOM 892	HG1	THR A	65	160.987	1.675	0.620	1.00	0.00
ATOM 893	1HG2	THR A	65	161.971	2.882	3.507	1.00	0.00
ATOM 894	2HG2	THR A	65	160.656	4.050	3.632	1.00	0.00
ATOM 895	3HG2	THR A	65	162.209	4.539	2.954	1.00	0.00
ATOM 896	N	PHE A	66	158.661	4.639	-0.541	1.00	0.00
ATOM 897	CA	PHE A	66	158.299	4.742	-1.950	1.00	0.00
ATOM 898	C	PHE A	66	159.221	5.716	-2.679	1.00	0.00
ATOM 899	O	PHE A	66	159.301	6.892	-2.326	1.00	0.00
ATOM 900	CB	PHE A	66	156.845	5.196	-2.093	1.00	0.00
ATOM 901	CG	PHE A	66	156.255	4.906	-3.443	1.00	0.00
ATOM 902	CD1	PHE A	66	155.891	3.615	-3.791	1.00	0.00
ATOM 903	CD2	PHE A	66	156.065	5.924	-4.364	1.00	0.00
ATOM 904	CE1	PHE A	66	155.348	3.345	-5.033	1.00	0.00
ATOM 905	CE2	PHE A	66	155.523	5.659	-5.607	1.00	0.00
ATOM 906	CZ	PHE A	66	155.163	4.368	-5.943	1.00	0.00
ATOM 907	H	PHE A	66	158.514	5.408	0.047	1.00	0.00
ATOM 908	HA	PHE A	66	158.406	3.764	-2.393	1.00	0.00
ATOM 909	1HB	PHE A	66	156.243	4.691	-1.353	1.00	0.00

ATOM 910	2HB	PHE A	66	156.791	6.263	-1.927	1.00	0.00
ATOM 911	HD1	PHE A	66	156.035	2.814	-3.082	1.00	0.00
ATOM 912	HD2	PHE A	66	156.345	6.933	-4.104	1.00	0.00
ATOM 913	HE1	PHE A	66	155.069	2.333	-5.293	1.00	0.00
ATOM 914	HE2	PHE A	66	155.379	6.461	-6.316	1.00	0.00
ATOM 915	HZ	PHE A	66	154.739	4.159	-6.913	1.00	0.00
ATOM 916	N	ARG A	67	159.915	5.216	-3.697	1.00	0.00
ATOM 917	CA	ARG A	67	160.832	6.041	-4.475	1.00	0.00
ATOM 918	C	ARG A	67	161.929	6.620	-3.587	1.00	0.00
ATOM 919	O	ARG A	67	162.433	7.715	-3.841	1.00	0.00
ATOM 920	CB	ARG A	67	160.070	7.173	-5.166	1.00	0.00
ATOM 921	CG	ARG A	67	158.877	6.694	-5.979	1.00	0.00
ATOM 922	CD	ARG A	67	159.187	6.672	-7.467	1.00	0.00
ATOM 923	NE	ARG A	67	158.148	5.989	-8.234	1.00	0.00
ATOM 924	CZ	ARG A	67	158.009	6.095	-9.553	1.00	0.00
ATOM 925	NH1	ARG A	67	158.840	6.854	-10.257	1.00	0.00
ATOM 926	NH2	ARG A	67	157.035	5.440	-10.172	1.00	0.00
ATOM 927	H	ARG A	67	159.809	4.270	-3.929	1.00	0.00
ATOM 928	HA	ARG A	67	161.287	5.413	-5.225	1.00	0.00
ATOM 929	1HB	ARG A	67	159.713	7.862	-4.417	1.00	0.00
ATOM 930	2HB	ARG A	67	160.746	7.692	-5.830	1.00	0.00
ATOM 931	1HG	ARG A	67	158.615	5.696	-5.662	1.00	0.00
ATOM 932	2HG	ARG A	67	158.045	7.361	-5.805	1.00	0.00
ATOM 933	1HD	ARG A	67	159.272	7.689	-7.821	1.00	0.00
ATOM 934	2HD	ARG A	67	160.127	6.161	-7.618	1.00	0.00
ATOM 935	HE	ARG A	67	157.520	5.422	-7.739	1.00	0.00
ATOM 936	1HH1	ARG A	67	159.576	7.350	-9.797	1.00	0.00
ATOM 937	2HH1	ARG A	67	158.731	6.929	-11.248	1.00	0.00
ATOM 938	1HH2	ARG A	67	156.407	4.867	-9.647	1.00	0.00

ATOM 939	2HH2	ARG A	67	156.931	5.520	-11.163	1.00	0.00
ATOM 940	N	GLY A	68	162.294	5.880	-2.546	1.00	0.00
ATOM 941	CA	GLY A	68	163.328	6.336	-1.637	1.00	0.00
ATOM 942	C	GLY A	68	162.851	7.452	-0.728	1.00	0.00
ATOM 943	O	GLY A	68	163.645	8.277	-0.277	1.00	0.00
ATOM 944	H	GLY A	68	161.858	5.016	-2.394	1.00	0.00
ATOM 945	1HA	GLY A	68	163.650	5.504	-1.028	1.00	0.00
ATOM 946	2HA	GLY A	68	164.169	6.692	-2.215	1.00	0.00
ATOM 947	N	THR A	69	161.549	7.477	-0.459	1.00	0.00
ATOM 948	CA	THR A	69	160.967	8.500	0.402	1.00	0.00
ATOM 949	C	THR A	69	160.013	7.879	1.417	1.00	0.00
ATOM 950	O	THR A	69	158.835	7.665	1.126	1.00	0.00
ATOM 951	CB	THR A	69	160.228	9.543	-0.438	1.00	0.00
ATOM 952	OG1	THR A	69	161.060	10.033	-1.474	1.00	0.00
ATOM 953	CG2	THR A	69	159.750	10.732	0.367	1.00	0.00
ATOM 954	H	THR A	69	160.967	6.792	-0.848	1.00	0.00
ATOM 955	HA	THR A	69	161.772	8.984	0.934	1.00	0.00
ATOM 956	HB	THR A	69	159.362	9.079	-0.889	1.00	0.00
ATOM 957	HG1	THR A	69	161.864	10.397	-1.095	1.00	0.00
ATOM 958	1HG2	THR A	69	158.755	11.006	0.048	1.00	0.00
ATOM 959	2HG2	THR A	69	160.421	11.564	0.214	1.00	0.00
ATOM 960	3HG2	THR A	69	159.732	10.473	1.416	1.00	0.00
ATOM 961	N	ARG A	70	160.528	7.590	2.608	1.00	0.00
ATOM 962	CA	ARG A	70	159.721	6.993	3.665	1.00	0.00
ATOM 963	C	ARG A	70	158.604	7.938	4.097	1.00	0.00
ATOM 964	O	ARG A	70	158.855	9.085	4.463	1.00	0.00
ATOM 965	CB	ARG A	70	160.598	6.640	4.867	1.00	0.00
ATOM 966	CG	ARG A	70	159.836	5.977	6.004	1.00	0.00
ATOM 967	CD	ARG A	70	160.300	6.481	7.361	1.00	0.00

ATOM 968	NE	ARG A	70	160.874	5.412	8.175	1.00	0.00
ATOM 969	CZ	ARG A	70	161.488	5.614	9.338	1.00	0.00
ATOM 970	NH1	ARG A	70	161.607	6.842	9.829	1.00	0.00
ATOM 971	NH2	ARG A	70	161.982	4.586	10.014	1.00	0.00
ATOM 972	H	ARG A	70	161.472	7.783	2.779	1.00	0.00
ATOM 973	HA	ARG A	70	159.279	6.088	3.274	1.00	0.00
ATOM 974	1HB	ARG A	70	161.378	5.965	4.544	1.00	0.00
ATOM 975	2HB	ARG A	70	161.052	7.544	5.245	1.00	0.00
ATOM 976	1HG	ARG A	70	158.784	6.193	5.892	1.00	0.00
ATOM 977	2HG	ARG A	70	159.992	4.908	5.953	1.00	0.00
ATOM 978	1HD	ARG A	70	161.046	7.247	7.213	1.00	0.00
ATOM 979	2HD	ARG A	70	159.453	6.901	7.883	1.00	0.00
ATOM 980	HE	ARG A	70	160.800	4.496	7.836	1.00	0.00
ATOM 981	1HH1	ARG A	70	161.237	7.621	9.325	1.00	0.00
ATOM 982	2HH1	ARG A	70	162.069	6.987	10.705	1.00	0.00
ATOM 983	1HH2	ARG A	70	161.894	3.659	9.650	1.00	0.00
ATOM 984	2HH2	ARG A	70	162.443	4.738	10.889	1.00	0.00
ATOM 985	N	TYR A	71	157.370	7.446	4.052	1.00	0.00
ATOM 986	CA	TYR A	71	156.214	8.246	4.439	1.00	0.00
ATOM 987	C	TYR A	71	155.763	7.901	5.855	1.00	0.00
ATOM 988	O	TYR A	71	155.335	8.772	6.611	1.00	0.00
ATOM 989	CB	TYR A	71	155.062	8.026	3.457	1.00	0.00
ATOM 990	CG	TYR A	71	155.320	8.599	2.082	1.00	0.00
ATOM 991	CD1	TYR A	71	155.325	7.783	0.958	1.00	0.00
ATOM 992	CD2	TYR A	71	155.557	9.957	1.908	1.00	0.00
ATOM 993	CE1	TYR A	71	155.560	8.303	-0.301	1.00	0.00
ATOM 994	CE2	TYR A	71	155.793	10.485	0.652	1.00	0.00
ATOM 995	CZ	TYR A	71	155.794	9.654	-0.448	1.00	0.00
ATOM 996	OH	TYR A	71	156.028	10.176	-1.700	1.00	0.00



ATOM 997	H	TYR A	71	157.233	6.523	3.751	1.00	0.00
ATOM 998	HA	TYR A	71	156.506	9.285	4.410	1.00	0.00
ATOM 999	1HB	TYR A	71	154.891	6.965	3.347	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.170	8.491	3.849	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.142	6.725	1.076	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.557	10.605	2.772	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.561	7.653	-1.163	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.976	11.543	0.538	1.00	0.00
ATOM 1005	HH	TYR A	71	155.312	9.928	-2.289	1.00	0.00
ATOM 1006	N	PHE A	72	155.865	6.623	6.207	1.00	0.00
ATOM 1007	CA	PHE A	72	155.467	6.162	7.533	1.00	0.00
ATOM 1008	C	PHE A	72	156.458	5.134	8.069	1.00	0.00
ATOM 1009	O	PHE A	72	157.415	4.764	7.388	1.00	0.00
ATOM 1010	CB	PHE A	72	154.063	5.558	7.486	1.00	0.00
ATOM 1011	CG	PHE A	72	153.887	4.530	6.405	1.00	0.00
ATOM 1012	CD1	PHE A	72	153.603	4.914	5.104	1.00	0.00
ATOM 1013	CD2	PHE A	72	154.006	3.179	6.690	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.441	3.971	4.108	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.844	2.231	5.697	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.562	2.628	4.405	1.00	0.00
ATOM 1017	H	PHE A	72	156.214	5.975	5.561	1.00	0.00
ATOM 1018	HA	PHE A	72	155.461	7.017	8.192	1.00	0.00
ATOM 1019	1HB	PHE A	72	153.851	5.084	8.432	1.00	0.00
ATOM 1020	2HB	PHE A	72	153.345	6.348	7.315	1.00	0.00
ATOM 1021	HD1	PHE A	72	153.509	5.965	4.871	1.00	0.00
ATOM 1022	HD2	PHE A	72	154.227	2.868	7.700	1.00	0.00
ATOM 1023	HE1	PHE A	72	153.219	4.284	3.097	1.00	0.00
ATOM 1024	HE2	PHE A	72	153.939	1.181	5.932	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.435	1.888	3.628	1.00	0.00

ATOM 1026	N	THR A	73	156.221	4.676	9.294	1.00	0.00
ATOM 1027	CA	THR A	73	157.093	3.690	9.923	1.00	0.00
ATOM 1028	C	THR A	73	156.375	2.353	10.085	1.00	0.00
ATOM 1029	O	THR A	73	155.407	2.245	10.838	1.00	0.00
ATOM 1030	CB	THR A	73	157.569	4.194	11.287	1.00	0.00
ATOM 1031	OG1	THR A	73	157.769	5.596	11.260	1.00	0.00
ATOM 1032	CG2	THR A	73	158.861	3.554	11.744	1.00	0.00
ATOM 1033	H	THR A	73	155.443	5.008	9.787	1.00	0.00
ATOM 1034	HA	THR A	73	157.950	3.549	9.283	1.00	0.00
ATOM 1035	HB	THR A	73	156.810	3.974	12.025	1.00	0.00
ATOM 1036	HG1	THR A	73	158.374	5.820	10.549	1.00	0.00
ATOM 1037	1HG2	THR A	73	158.644	2.615	12.232	1.00	0.00
ATOM 1038	2HG2	THR A	73	159.362	4.213	12.438	1.00	0.00
ATOM 1039	3HG2	THR A	73	159.498	3.378	10.890	1.00	0.00
ATOM 1040	N	CYS A	74	156.856	1.339	9.374	1.00	0.00
ATOM 1041	CA	CYS A	74	156.259	0.010	9.438	1.00	0.00
ATOM 1042	C	CYS A	74	157.337	-1.069	9.474	1.00	0.00
ATOM 1043	O	CYS A	74	158.530	-0.770	9.420	1.00	0.00
ATOM 1044	CB	CYS A	74	155.333	-0.215	8.241	1.00	0.00
ATOM 1045	SG	CYS A	74	153.621	0.290	8.527	1.00	0.00
ATOM 1046	H	CYS A	74	157.629	1.488	8.790	1.00	0.00
ATOM 1047	HA	CYS A	74	155.679	-0.049	10.346	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.705	0.347	7.398	1.00	0.00
ATOM 1049	2HB	CYS A	74	155.329	-1.267	7.992	1.00	0.00
ATOM 1050	HG	CYS A	74	153.631	1.051	9.113	1.00	0.00
ATOM 1051	N	ALA A	75	156.908	-2.324	9.562	1.00	0.00
ATOM 1052	CA	ALA A	75	157.836	-3.447	9.604	1.00	0.00
ATOM 1053	C	ALA A	75	158.524	-3.641	8.257	1.00	0.00
ATOM 1054	O	ALA A	75	158.192	-2.974	7.277	1.00	0.00

ATOM 1055	CB	ALA A	75	157.108	-4.718	10.014	1.00	0.00
ATOM 1056	H	ALA A	75	155.945	-2.498	9.601	1.00	0.00
ATOM 1057	HA	ALA A	75	158.586	-3.232	10.352	1.00	0.00
ATOM 1058	1HB	ALA A	75	156.868	-5.295	9.134	1.00	0.00
ATOM 1059	2HB	ALA A	75	156.197	-4.459	10.535	1.00	0.00
ATOM 1060	3HB	ALA A	75	157.741	-5.301	10.666	1.00	0.00
ATOM 1061	N	LEU A	76	159.485	-4.558	8.216	1.00	0.00
ATOM 1062	CA	LEU A	76	160.222	-4.840	6.989	1.00	0.00
ATOM 1063	C	LEU A	76	159.471	-5.846	6.123	1.00	0.00
ATOM 1064	O	LEU A	76	158.917	-6.822	6.628	1.00	0.00
ATOM 1065	CB	LEU A	76	161.617	-5.374	7.317	1.00	0.00
ATOM 1066	CG	LEU A	76	162.644	-4.307	7.700	1.00	0.00
ATOM 1067	CD1	LEU A	76	163.639	-4.860	8.709	1.00	0.00
ATOM 1068	CD2	LEU A	76	163.367	-3.795	6.463	1.00	0.00
ATOM 1069	H	LEU A	76	159.706	-5.056	9.031	1.00	0.00
ATOM 1070	HA	LEU A	76	160.320	-3.914	6.442	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.529	-6.070	8.139	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.988	-5.905	6.455	1.00	0.00
ATOM 1073	HG	LEU A	76	162.134	-3.472	8.159	1.00	0.00
ATOM 1074	1HD1	LEU A	76	163.261	-4.706	9.709	1.00	0.00
ATOM 1075	2HD1	LEU A	76	164.585	-4.352	8.600	1.00	0.00
ATOM 1076	3HD1	LEU A	76	163.777	-5.919	8.536	1.00	0.00
ATOM 1077	1HD2	LEU A	76	162.751	-3.963	5.592	1.00	0.00
ATOM 1078	2HD2	LEU A	76	164.302	-4.323	6.349	1.00	0.00
ATOM 1079	3HD2	LEU A	76	163.560	-2.739	6.570	1.00	0.00
ATOM 1080	N	LYS A	77	159.456	-5.600	4.817	1.00	0.00
ATOM 1081	CA	LYS A	77	158.773	-6.486	3.881	1.00	0.00
ATOM 1082	C	LYS A	77	157.282	-6.563	4.193	1.00	0.00
ATOM 1083	O	LYS A	77	156.676	-7.632	4.119	1.00	0.00

ATOM 1084	CB	LYS A	77	159.390	-7.885	3.928	1.00	0.00
ATOM 1085	CG	LYS A	77	160.875	-7.906	3.603	1.00	0.00
ATOM 1086	CD	LYS A	77	161.118	-7.884	2.103	1.00	0.00
ATOM 1087	CE	LYS A	77	162.543	-7.467	1.776	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.090	-8.220	0.614	1.00	0.00
ATOM 1089	H	LYS A	77	159.916	-4.805	4.475	1.00	0.00
ATOM 1090	HA	LYS A	77	158.900	-6.079	2.889	1.00	0.00
ATOM 1091	1HB	LYS A	77	159.255	-8.293	4.918	1.00	0.00
ATOM 1092	2HB	LYS A	77	158.879	-8.515	3.215	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.343	-7.040	4.047	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.311	-8.804	4.017	1.00	0.00
ATOM 1095	1HD	LYS A	77	160.944	-8.872	1.705	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.434	-7.183	1.648	1.00	0.00
ATOM 1097	1HE	LYS A	77	162.551	-6.412	1.544	1.00	0.00
ATOM 1098	2HE	LYS A	77	163.166	-7.649	2.639	1.00	0.00
ATOM 1099	1HZ	LYS A	77	162.550	-7.995	-0.246	1.00	0.00
ATOM 1100	2HZ	LYS A	77	163.028	-9.244	0.790	1.00	0.00
ATOM 1101	3HZ	LYS A	77	164.088	-7.967	0.461	1.00	0.00
ATOM 1102	N	LYS A	78	156.696	-5.423	4.544	1.00	0.00
ATOM 1103	CA	LYS A	78	155.275	-5.362	4.868	1.00	0.00
ATOM 1104	C	LYS A	78	154.692	-4.001	4.500	1.00	0.00
ATOM 1105	O	LYS A	78	153.843	-3.465	5.212	1.00	0.00
ATOM 1106	CB	LYS A	78	155.058	-5.638	6.357	1.00	0.00
ATOM 1107	CG	LYS A	78	155.577	-6.994	6.806	1.00	0.00
ATOM 1108	CD	LYS A	78	155.301	-7.234	8.282	1.00	0.00
ATOM 1109	CE	LYS A	78	154.066	-8.098	8.483	1.00	0.00
ATOM 1110	NZ	LYS A	78	153.349	-7.755	9.743	1.00	0.00
ATOM 1111	H	LYS A	78	157.232	-4.604	4.586	1.00	0.00
ATOM 1112	HA	LYS A	78	154.772	-6.123	4.293	1.00	0.00

ATOM 1113	1HB	LYS A	78	155.565	-4.875	6.930	1.00	0.00
ATOM 1114	2HB	LYS A	78	154.001	-5.592	6.569	1.00	0.00
ATOM 1115	1HG	LYS A	78	155.089	-7.764	6.228	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.643	-7.035	6.636	1.00	0.00
ATOM 1117	1HD	LYS A	78	156.152	-7.734	8.720	1.00	0.00
ATOM 1118	2HD	LYS A	78	155.148	-6.283	8.769	1.00	0.00
ATOM 1119	1HE	LYS A	78	153.399	-7.950	7.649	1.00	0.00
ATOM 1120	2HE	LYS A	78	154.369	-9.134	8.522	1.00	0.00
ATOM 1121	1HZ	LYS A	78	152.922	-8.610	10.155	1.00	0.00
ATOM 1122	2HZ	LYS A	78	152.597	-7.065	9.549	1.00	0.00
ATOM 1123	3HZ	LYS A	78	154.012	-7.345	10.431	1.00	0.00
ATOM 1124	N	ALA A	79	155.152	-3.448	3.382	1.00	0.00
ATOM 1125	CA	ALA A	79	154.674	-2.151	2.920	1.00	0.00
ATOM 1126	C	ALA A	79	154.599	-2.103	1.397	1.00	0.00
ATOM 1127	O	ALA A	79	155.621	-2.002	0.719	1.00	0.00
ATOM 1128	CB	ALA A	79	155.576	-1.041	3.440	1.00	0.00
ATOM 1129	H	ALA A	79	155.828	-3.923	2.856	1.00	0.00
ATOM 1130	HA	ALA A	79	153.684	-1.996	3.324	1.00	0.00
ATOM 1131	1HB	ALA A	79	155.178	-0.659	4.369	1.00	0.00
ATOM 1132	2HB	ALA A	79	155.621	-0.243	2.714	1.00	0.00
ATOM 1133	3HB	ALA A	79	156.569	-1.432	3.607	1.00	0.00
ATOM 1134	N	LEU A	80	153.382	-2.177	0.868	1.00	0.00
ATOM 1135	CA	LEU A	80	153.172	-2.143	-0.576	1.00	0.00
ATOM 1136	C	LEU A	80	152.306	-0.951	-0.970	1.00	0.00
ATOM 1137	O	LEU A	80	151.157	-0.836	-0.541	1.00	0.00
ATOM 1138	CB	LEU A	80	152.518	-3.443	-1.047	1.00	0.00
ATOM 1139	CG	LEU A	80	152.189	-3.497	-2.540	1.00	0.00
ATOM 1140	CD1	LEU A	80	153.449	-3.741	-3.356	1.00	0.00
ATOM 1141	CD2	LEU A	80	151.155	-4.579	-2.817	1.00	0.00

ATOM 1142	H	LEU A	80	152.606	-2.257	1.462	1.00	0.00
ATOM 1143	HA	LEU A	80	154.137	-2.043	-1.049	1.00	0.00
ATOM 1144	1HB	LEU A	80	153.185	-4.261	-0.816	1.00	0.00
ATOM 1145	2HB	LEU A	80	151.601	-3.581	-0.494	1.00	0.00
ATOM 1146	HG	LEU A	80	151.772	-2.549	-2.845	1.00	0.00
ATOM 1147	1HD1	LEU A	80	153.391	-3.188	-4.282	1.00	0.00
ATOM 1148	2HD1	LEU A	80	153.541	-4.794	-3.571	1.00	0.00
ATOM 1149	3HD1	LEU A	80	154.311	-3.411	-2.794	1.00	0.00
ATOM 1150	1HD2	LEU A	80	150.553	-4.292	-3.666	1.00	0.00
ATOM 1151	2HD2	LEU A	80	150.522	-4.703	-1.951	1.00	0.00
ATOM 1152	3HD2	LEU A	80	151.658	-5.511	-3.032	1.00	0.00
ATOM 1153	N	PHE A	81	152.863	-0.066	-1.789	1.00	0.00
ATOM 1154	CA	PHE A	81	152.142	1.118	-2.242	1.00	0.00
ATOM 1155	C	PHE A	81	151.299	0.803	-3.473	1.00	0.00
ATOM 1156	O	PHE A	81	151.736	0.083	-4.371	1.00	0.00
ATOM 1157	CB	PHE A	81	153.123	2.249	-2.557	1.00	0.00
ATOM 1158	CG	PHE A	81	153.763	2.847	-1.336	1.00	0.00
ATOM 1159	CD1	PHE A	81	153.243	3.993	-0.757	1.00	0.00
ATOM 1160	CD2	PHE A	81	154.883	2.260	-0.768	1.00	0.00
ATOM 1161	CE1	PHE A	81	153.829	4.545	0.367	1.00	0.00
ATOM 1162	CE2	PHE A	81	155.473	2.808	0.355	1.00	0.00
ATOM 1163	CZ	PHE A	81	154.946	3.952	0.923	1.00	0.00
ATOM 1164	H	PHE A	81	153.783	-0.212	-2.096	1.00	0.00
ATOM 1165	HA	PHE A	81	151.487	1.433	-1.443	1.00	0.00
ATOM 1166	1HB	PHE A	81	153.910	1.868	-3.191	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.597	3.037	-3.077	1.00	0.00
ATOM 1168	HD1	PHE A	81	152.370	4.457	-1.190	1.00	0.00
ATOM 1169	HD2	PHE A	81	155.296	1.367	-1.212	1.00	0.00
ATOM 1170	HE1	PHE A	81	153.416	5.439	0.809	1.00	0.00

ATOM 1171	HE2	PHE A	81	156.346	2.343	0.788	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.407	4.381	1.802	1.00	0.00
ATOM 1173	N	VAL A	82	150.087	1.347	-3.509	1.00	0.00
ATOM 1174	CA	VAL A	82	149.182	1.124	-4.631	1.00	0.00
ATOM 1175	C	VAL A	82	148.297	2.342	-4.873	1.00	0.00
ATOM 1176	O	VAL A	82	148.200	3.229	-4.027	1.00	0.00
ATOM 1177	CB	VAL A	82	148.288	-0.107	-4.394	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.115	-1.382	-4.425	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.539	0.021	-3.077	1.00	0.00
ATOM 1180	H	VAL A	82	149.794	1.912	-2.764	1.00	0.00
ATOM 1181	HA	VAL A	82	149.780	0.945	-5.512	1.00	0.00
ATOM 1182	HB	VAL A	82	147.561	-0.158	-5.192	1.00	0.00
ATOM 1183	1HG1	VAL A	82	149.562	-1.499	-5.401	1.00	0.00
ATOM 1184	2HG1	VAL A	82	148.478	-2.230	-4.217	1.00	0.00
ATOM 1185	3HG1	VAL A	82	149.893	-1.325	-3.677	1.00	0.00
ATOM 1186	1HG2	VAL A	82	147.408	-0.959	-2.641	1.00	0.00
ATOM 1187	2HG2	VAL A	82	146.572	0.469	-3.254	1.00	0.00
ATOM 1188	3HG2	VAL A	82	148.106	0.644	-2.400	1.00	0.00
ATOM 1189	N	LYS A	83	147.652	2.375	-6.035	1.00	0.00
ATOM 1190	CA	LYS A	83	146.774	3.484	-6.390	1.00	0.00
ATOM 1191	C	LYS A	83	145.517	3.482	-5.528	1.00	0.00
ATOM 1192	O	LYS A	83	144.750	2.518	-5.530	1.00	0.00
ATOM 1193	CB	LYS A	83	146.392	3.406	-7.870	1.00	0.00
ATOM 1194	CG	LYS A	83	147.588	3.405	-8.808	1.00	0.00
ATOM 1195	CD	LYS A	83	147.168	3.152	-10.247	1.00	0.00
ATOM 1196	CE	LYS A	83	147.976	3.993	-11.220	1.00	0.00
ATOM 1197	NZ	LYS A	83	148.286	3.250	-12.472	1.00	0.00
ATOM 1198	H	LYS A	83	147.770	1.637	-6.669	1.00	0.00
ATOM 1199	HA	LYS A	83	147.313	4.403	-6.216	1.00	0.00

ATOM 1200	1HB	LYS A	83	145.830	2.498	-8.038	1.00	0.00
ATOM 1201	2HB	LYS A	83	145.770	4.254	-8.115	1.00	0.00
ATOM 1202	1HG	LYS A	83	148.078	4.366	-8.751	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.274	2.630	-8.501	1.00	0.00
ATOM 1204	1HD	LYS A	83	147.318	2.108	-10.477	1.00	0.00
ATOM 1205	2HD	LYS A	83	146.121	3.398	-10.354	1.00	0.00
ATOM 1206	1HE	LYS A	83	147.410	4.879	-11.469	1.00	0.00
ATOM 1207	2HE	LYS A	83	148.902	4.282	-10.744	1.00	0.00
ATOM 1208	1HZ	LYS A	83	149.234	3.508	-12.816	1.00	0.00
ATOM 1209	2HZ	LYS A	83	147.589	3.481	-13.207	1.00	0.00
ATOM 1210	3HZ	LYS A	83	148.261	2.226	-12.296	1.00	0.00
ATOM 1211	N	LEU A	84	145.313	4.569	-4.792	1.00	0.00
ATOM 1212	CA	LEU A	84	144.151	4.700	-3.922	1.00	0.00
ATOM 1213	C	LEU A	84	142.856	4.573	-4.719	1.00	0.00
ATOM 1214	O	LEU A	84	141.863	4.038	-4.227	1.00	0.00
ATOM 1215	CB	LEU A	84	144.189	6.045	-3.194	1.00	0.00
ATOM 1216	CG	LEU A	84	142.978	6.339	-2.308	1.00	0.00
ATOM 1217	CD1	LEU A	84	143.141	5.682	-0.946	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.780	7.840	-2.158	1.00	0.00
ATOM 1219	H	LEU A	84	145.962	5.301	-4.836	1.00	0.00
ATOM 1220	HA	LEU A	84	144.191	3.905	-3.193	1.00	0.00
ATOM 1221	1HB	LEU A	84	145.075	6.071	-2.577	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.264	6.827	-3.934	1.00	0.00
ATOM 1223	HG	LEU A	84	142.091	5.928	-2.771	1.00	0.00
ATOM 1224	1HD1	LEU A	84	143.630	4.727	-1.063	1.00	0.00
ATOM 1225	2HD1	LEU A	84	142.169	5.537	-0.497	1.00	0.00
ATOM 1226	3HD1	LEU A	84	143.739	6.318	-0.309	1.00	0.00
ATOM 1227	1HD2	LEU A	84	141.894	8.030	-1.571	1.00	0.00
ATOM 1228	2HD2	LEU A	84	142.667	8.287	-3.134	1.00	0.00



ATOM 1229	3HD2	LEU A	84	143.639	8.268	-1.663	1.00	0.00
ATOM 1230	N	LYS A	85	142.875	5.070	-5.951	1.00	0.00
ATOM 1231	CA	LYS A	85	141.701	5.014	-6.815	1.00	0.00
ATOM 1232	C	LYS A	85	141.332	3.569	-7.138	1.00	0.00
ATOM 1233	O	LYS A	85	140.173	3.263	-7.421	1.00	0.00
ATOM 1234	CB	LYS A	85	141.958	5.788	-8.109	1.00	0.00
ATOM 1235	CG	LYS A	85	143.098	5.223	-8.941	1.00	0.00
ATOM 1236	CD	LYS A	85	143.604	6.236	-9.955	1.00	0.00
ATOM 1237	CE	LYS A	85	144.941	5.817	-10.542	1.00	0.00
ATOM 1238	NZ	LYS A	85	145.553	6.900	-11.362	1.00	0.00
ATOM 1239	H	LYS A	85	143.696	5.486	-6.287	1.00	0.00
ATOM 1240	HA	LYS A	85	140.879	5.473	-6.289	1.00	0.00
ATOM 1241	1HB	LYS A	85	141.060	5.770	-8.710	1.00	0.00
ATOM 1242	2HB	LYS A	85	142.195	6.812	-7.862	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.910	4.952	-8.283	1.00	0.00
ATOM 1244	2HG	LYS A	85	142.748	4.346	-9.465	1.00	0.00
ATOM 1245	1HD	LYS A	85	142.882	6.323	-10.753	1.00	0.00
ATOM 1246	2HD	LYS A	85	143.719	7.193	-9.466	1.00	0.00
ATOM 1247	1HE	LYS A	85	145.613	5.567	-9.734	1.00	0.00
ATOM 1248	2HE	LYS A	85	144.790	4.948	-11.165	1.00	0.00
ATOM 1249	1HZ	LYS A	85	145.891	7.666	-10.746	1.00	0.00
ATOM 1250	2HZ	LYS A	85	144.850	7.287	-12.023	1.00	0.00
ATOM 1251	3HZ	LYS A	85	146.356	6.526	-11.906	1.00	0.00
ATOM 1252	N	SER A	86	142.322	2.682	-7.094	1.00	0.00
ATOM 1253	CA	SER A	86	142.098	1.271	-7.381	1.00	0.00
ATOM 1254	C	SER A	86	142.057	0.453	-6.095	1.00	0.00
ATOM 1255	O	SER A	86	142.443	-0.716	-6.079	1.00	0.00
ATOM 1256	CB	SER A	86	143.194	0.737	-8.305	1.00	0.00
ATOM 1257	OG	SER A	86	143.269	1.496	-9.499	1.00	0.00

ATOM 1258	H	SER A	86	143.225	2.984	-6.862	1.00	0.00
ATOM 1259	HA	SER A	86	141.144	1.182	-7.881	1.00	0.00
ATOM 1260	1HB	SER A	86	144.146	0.792	-7.799	1.00	0.00
ATOM 1261	2HB	SER A	86	142.980	-0.290	-8.558	1.00	0.00
ATOM 1262	HG	SER A	86	142.385	1.639	-9.845	1.00	0.00
ATOM 1263	N	CYS A	87	141.587	1.075	-5.018	1.00	0.00
ATOM 1264	CA	CYS A	87	141.496	0.404	-3.726	1.00	0.00
ATOM 1265	C	CYS A	87	140.043	0.114	-3.366	1.00	0.00
ATOM 1266	O	CYS A	87	139.125	0.737	-3.901	1.00	0.00
ATOM 1267	CB	CYS A	87	142.143	1.260	-2.637	1.00	0.00
ATOM 1268	SG	CYS A	87	143.948	1.167	-2.600	1.00	0.00
ATOM 1269	H	CYS A	87	141.296	2.007	-5.094	1.00	0.00
ATOM 1270	HA	CYS A	87	142.029	-0.532	-3.801	1.00	0.00
ATOM 1271	1HB	CYS A	87	141.871	2.293	-2.792	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.777	0.938	-1.673	1.00	0.00
ATOM 1273	HG	CYS A	87	144.265	1.809	-1.959	1.00	0.00
ATOM 1274	N	ARG A	88	139.840	-0.834	-2.458	1.00	0.00
ATOM 1275	CA	ARG A	88	138.497	-1.205	-2.028	1.00	0.00
ATOM 1276	C	ARG A	88	138.413	-1.271	-0.503	1.00	0.00
ATOM 1277	O	ARG A	88	139.296	-1.826	0.151	1.00	0.00
ATOM 1278	CB	ARG A	88	138.102	-2.555	-2.631	1.00	0.00
ATOM 1279	CG	ARG A	88	137.308	-2.435	-3.921	1.00	0.00
ATOM 1280	CD	ARG A	88	135.810	-2.459	-3.658	1.00	0.00
ATOM 1281	NE	ARG A	88	135.049	-1.912	-4.778	1.00	0.00
ATOM 1282	CZ	ARG A	88	133.789	-1.490	-4.682	1.00	0.00
ATOM 1283	NH1	ARG A	88	133.148	-1.550	-3.522	1.00	0.00
ATOM 1284	NH2	ARG A	88	133.171	-1.005	-5.749	1.00	0.00
ATOM 1285	H	ARG A	88	140.612	-1.296	-2.068	1.00	0.00
ATOM 1286	HA	ARG A	88	137.816	-0.449	-2.386	1.00	0.00

ATOM 1287	1HB	ARG A	88	138.998	-3.121	-2.836	1.00	0.00
ATOM 1288	2HB	ARG A	88	137.502	-3.096	-1.914	1.00	0.00
ATOM 1289	1HG	ARG A	88	137.563	-1.504	-4.405	1.00	0.00
ATOM 1290	2HG	ARG A	88	137.564	-3.262	-4.568	1.00	0.00
ATOM 1291	1HD	ARG A	88	135.504	-3.481	-3.491	1.00	0.00
ATOM 1292	2HD	ARG A	88	135.604	-1.873	-2.773	1.00	0.00
ATOM 1293	HE	ARG A	88	135.498	-1.856	-5.647	1.00	0.00
ATOM 1294	1HH1	ARG A	88	133.608	-1.915	-2.713	1.00	0.00
ATOM 1295	2HH1	ARG A	88	132.203	-1.231	-3.456	1.00	0.00
ATOM 1296	1HH2	ARG A	88	133.649	-0.958	-6.626	1.00	0.00
ATOM 1297	2HH2	ARG A	88	132.225	-0.688	-5.678	1.00	0.00
ATOM 1298	N	PRO A	89	137.344	-0.704	0.089	1.00	0.00
ATOM 1299	CA	PRO A	89	137.157	-0.707	1.544	1.00	0.00
ATOM 1300	C	PRO A	89	137.223	-2.113	2.132	1.00	0.00
ATOM 1301	O	PRO A	89	136.564	-3.031	1.646	1.00	0.00
ATOM 1302	CB	PRO A	89	135.757	-0.117	1.729	1.00	0.00
ATOM 1303	CG	PRO A	89	135.519	0.693	0.503	1.00	0.00
ATOM 1304	CD	PRO A	89	136.239	-0.019	-0.608	1.00	0.00
ATOM 1305	HA	PRO A	89	137.884	-0.079	2.037	1.00	0.00
ATOM 1306	1HB	PRO A	89	135.037	-0.916	1.822	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.737	0.498	2.617	1.00	0.00
ATOM 1308	1HG	PRO A	89	134.461	0.740	0.294	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.922	1.686	0.635	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.584	-0.732	-1.086	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.619	0.691	-1.326	1.00	0.00
ATOM 1312	N	ASP A	90	138.021	-2.273	3.183	1.00	0.00
ATOM 1313	CA	ASP A	90	138.172	-3.568	3.838	1.00	0.00
ATOM 1314	C	ASP A	90	137.378	-3.612	5.140	1.00	0.00
ATOM 1315	O	ASP A	90	137.759	-2.992	6.133	1.00	0.00

ATOM 1316	CB	ASP A	90	139.648	-3.854	4.116	1.00	0.00
ATOM 1317	CG	ASP A	90	139.948	-5.339	4.174	1.00	0.00
ATOM 1318	OD1	ASP A	90	140.366	-5.819	5.248	1.00	0.00
ATOM 1319	OD2	ASP A	90	139.764	-6.022	3.144	1.00	0.00
ATOM 1320	H	ASP A	90	138.520	-1.503	3.526	1.00	0.00
ATOM 1321	HA	ASP A	90	137.787	-4.323	3.170	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.247	-3.414	3.333	1.00	0.00
ATOM 1323	2HB	ASP A	90	139.921	-3.412	5.063	1.00	0.00
ATOM 1324	N	SER A	91	136.274	-4.352	5.129	1.00	0.00
ATOM 1325	CA	SER A	91	135.426	-4.478	6.310	1.00	0.00
ATOM 1326	C	SER A	91	135.724	-5.774	7.057	1.00	0.00
ATOM 1327	O	SER A	91	134.840	-6.355	7.688	1.00	0.00
ATOM 1328	CB	SER A	91	133.950	-4.434	5.911	1.00	0.00
ATOM 1329	OG	SER A	91	133.158	-3.879	6.947	1.00	0.00
ATOM 1330	H	SER A	91	136.023	-4.823	4.308	1.00	0.00
ATOM 1331	HA	SER A	91	135.639	-3.644	6.961	1.00	0.00
ATOM 1332	1HB	SER A	91	133.837	-3.827	5.024	1.00	0.00
ATOM 1333	2HB	SER A	91	133.605	-5.436	5.708	1.00	0.00
ATOM 1334	HG	SER A	91	132.243	-3.834	6.660	1.00	0.00
ATOM 1335	N	ARG A	92	136.972	-6.223	6.981	1.00	0.00
ATOM 1336	CA	ARG A	92	137.384	-7.451	7.650	1.00	0.00
ATOM 1337	C	ARG A	92	137.327	-7.291	9.166	1.00	0.00
ATOM 1338	O	ARG A	92	137.085	-8.254	9.893	1.00	0.00
ATOM 1339	CB	ARG A	92	138.798	-7.842	7.220	1.00	0.00
ATOM 1340	CG	ARG A	92	138.835	-8.741	5.995	1.00	0.00
ATOM 1341	CD	ARG A	92	140.147	-9.503	5.902	1.00	0.00
ATOM 1342	NE	ARG A	92	140.288	-10.485	6.976	1.00	0.00
ATOM 1343	CZ	ARG A	92	139.667	-11.663	6.989	1.00	0.00
ATOM 1344	NH1	ARG A	92	138.865	-12.010	5.991	1.00	0.00

ATOM 1345	NH2	ARG A	92	139.851	-12.496	8.004	1.00	0.00
ATOM 1346	H	ARG A	92	137.632	-5.717	6.462	1.00	0.00
ATOM 1347	HA	ARG A	92	136.700	-8.234	7.358	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.355	-6.944	6.997	1.00	0.00
ATOM 1349	2HB	ARG A	92	139.281	-8.361	8.035	1.00	0.00
ATOM 1350	1HG	ARG A	92	138.022	-9.450	6.056	1.00	0.00
ATOM 1351	2HG	ARG A	92	138.719	-8.133	5.109	1.00	0.00
ATOM 1352	1HD	ARG A	92	140.185	-10.016	4.953	1.00	0.00
ATOM 1353	2HD	ARG A	92	140.963	-8.798	5.962	1.00	0.00
ATOM 1354	HE	ARG A	92	140.875	-10.253	7.725	1.00	0.00
ATOM 1355	1HH1	ARG A	92	138.722	-11.386	5.223	1.00	0.00
ATOM 1356	2HH1	ARG A	92	138.403	-12.896	6.007	1.00	0.00
ATOM 1357	1HH2	ARG A	92	140.455	-12.240	8.758	1.00	0.00
ATOM 1358	2HH2	ARG A	92	139.385	-13.381	8.014	1.00	0.00
ATOM 1359	N	PHE A	93	137.554	-6.068	9.637	1.00	0.00
ATOM 1360	CA	PHE A	93	137.528	-5.782	11.067	1.00	0.00
ATOM 1361	C	PHE A	93	136.525	-4.678	11.385	1.00	0.00
ATOM 1362	O	PHE A	93	136.707	-3.917	12.335	1.00	0.00
ATOM 1363	CB	PHE A	93	138.921	-5.377	11.551	1.00	0.00
ATOM 1364	CG	PHE A	93	139.888	-6.524	11.626	1.00	0.00
ATOM 1365	CD1	PHE A	93	140.464	-6.884	12.834	1.00	0.00
ATOM 1366	CD2	PHE A	93	140.221	-7.243	10.489	1.00	0.00
ATOM 1367	CE1	PHE A	93	141.354	-7.938	12.907	1.00	0.00
ATOM 1368	CE2	PHE A	93	141.111	-8.298	10.555	1.00	0.00
ATOM 1369	CZ	PHE A	93	141.677	-8.646	11.765	1.00	0.00
ATOM 1370	H	PHE A	93	137.741	-5.341	9.007	1.00	0.00
ATOM 1371	HA	PHE A	93	137.227	-6.684	11.579	1.00	0.00
ATOM 1372	1HB	PHE A	93	139.330	-4.642	10.874	1.00	0.00
ATOM 1373	2HB	PHE A	93	138.839	-4.945	12.537	1.00	0.00

ATOM 1374 HD1 PHE A 93 140.212 -6.330 13.727 1.00 0.00  
ATOM 1375 HD2 PHE A 93 139.778 -6.971 9.543 1.00 0.00  
ATOM 1376 HE1 PHE A 93 141.796 -8.208 13.854 1.00 0.00  
ATOM 1377 HE2 PHE A 93 141.361 -8.850 9.662 1.00 0.00  
ATOM 1378 HZ PHE A 93 142.373 -9.471 11.820 1.00 0.00  
ATOM 1379 N ALA A 94 135.467 -4.596 10.586 1.00 0.00  
ATOM 1380 CA ALA A 94 134.436 -3.584 10.785 1.00 0.00  
ATOM 1381 C ALA A 94 133.274 -4.138 11.602 1.00 0.00  
ATOM 1382 O ALA A 94 132.658 -5.136 11.227 1.00 0.00  
ATOM 1383 CB ALA A 94 133.940 -3.064 9.444 1.00 0.00  
ATOM 1384 H ALA A 94 135.376 -5.231 9.844 1.00 0.00  
ATOM 1385 HA ALA A 94 134.879 -2.759 11.322 1.00 0.00  
ATOM 1386 1HB ALA A 94 133.035 -3.584 9.169 1.00 0.00  
ATOM 1387 2HB ALA A 94 134.696 -3.235 8.691 1.00 0.00  
ATOM 1388 3HB ALA A 94 133.739 -2.007 9.520 1.00 0.00  
ATOM 1389 N SER A 95 132.980 -3.485 12.721 1.00 0.00  
ATOM 1390 CA SER A 95 131.891 -3.913 13.593 1.00 0.00  
ATOM 1391 C SER A 95 130.740 -2.913 13.557 1.00 0.00  
ATOM 1392 O SER A 95 130.944 -1.724 13.314 1.00 0.00  
ATOM 1393 CB SER A 95 132.394 -4.078 15.028 1.00 0.00  
ATOM 1394 OG SER A 95 131.383 -4.612 15.865 1.00 0.00  
ATOM 1395 H SER A 95 133.508 -2.696 12.967 1.00 0.00  
ATOM 1396 HA SER A 95 131.535 -4.867 13.234 1.00 0.00  
ATOM 1397 1HB SER A 95 133.240 -4.748 15.035 1.00 0.00  
ATOM 1398 2HB SER A 95 132.695 -3.115 15.415 1.00 0.00  
ATOM 1399 HG SER A 95 131.061 -5.436 15.493 1.00 0.00  
ATOM 1400 N LEU A 96 129.529 -3.404 13.802 1.00 0.00  
ATOM 1401 CA LEU A 96 128.344 -2.554 13.798 1.00 0.00  
ATOM 1402 C LEU A 96 127.403 -2.931 14.938 1.00 0.00

ATOM 1403	O	LEU A	96	126.670	-3.916	14.852	1.00	0.00
ATOM 1404	CB	LEU A	96	127.616	-2.665	12.456	1.00	0.00
ATOM 1405	CG	LEU A	96	127.763	-1.451	11.537	1.00	0.00
ATOM 1406	CD1	LEU A	96	129.230	-1.182	11.239	1.00	0.00
ATOM 1407	CD2	LEU A	96	126.985	-1.664	10.247	1.00	0.00
ATOM 1408	H	LEU A	96	129.430	-4.361	13.989	1.00	0.00
ATOM 1409	HA	LEU A	96	128.669	-1.534	13.938	1.00	0.00
ATOM 1410	1HB	LEU A	96	127.996	-3.533	11.936	1.00	0.00
ATOM 1411	2HB	LEU A	96	126.564	-2.816	12.649	1.00	0.00
ATOM 1412	HG	LEU A	96	127.358	-0.581	12.034	1.00	0.00
ATOM 1413	1HD1	LEU A	96	129.616	-0.468	11.952	1.00	0.00
ATOM 1414	2HD1	LEU A	96	129.327	-0.782	10.241	1.00	0.00
ATOM 1415	3HD1	LEU A	96	129.788	-2.103	11.315	1.00	0.00
ATOM 1416	1HD2	LEU A	96	125.972	-1.959	10.481	1.00	0.00
ATOM 1417	2HD2	LEU A	96	127.460	-2.438	9.663	1.00	0.00
ATOM 1418	3HD2	LEU A	96	126.969	-0.743	9.681	1.00	0.00
ATOM 1419	N	GLN A	97	127.429	-2.139	16.006	1.00	0.00
ATOM 1420	CA	GLN A	97	126.577	-2.389	17.163	1.00	0.00
ATOM 1421	C	GLN A	97	126.881	-3.753	17.778	1.00	0.00
ATOM 1422	O	GLN A	97	126.251	-4.753	17.433	1.00	0.00
ATOM 1423	CB	GLN A	97	125.102	-2.314	16.763	1.00	0.00
ATOM 1424	CG	GLN A	97	124.743	-1.048	16.001	1.00	0.00
ATOM 1425	CD	GLN A	97	124.686	0.175	16.897	1.00	0.00
ATOM 1426	OE1	GLN A	97	123.756	0.338	17.686	1.00	0.00
ATOM 1427	NE2	GLN A	97	125.684	1.041	16.778	1.00	0.00
ATOM 1428	H	GLN A	97	128.035	-1.369	16.015	1.00	0.00
ATOM 1429	HA	GLN A	97	126.782	-1.623	17.896	1.00	0.00
ATOM 1430	1HB	GLN A	97	124.867	-3.162	16.139	1.00	0.00
ATOM 1431	2HB	GLN A	97	124.497	-2.355	17.656	1.00	0.00

ATOM 1432 1HG GLN A 97 125.485 -0.880 15.236 1.00 0.00  
ATOM 1433 2HG GLN A 97 123.775 -1.184 15.540 1.00 0.00  
ATOM 1434 1HE2 GLN A 97 126.392 0.846 16.128 1.00 0.00  
ATOM 1435 2HE2 GLN A 97 125.673 1.841 17.345 1.00 0.00  
ATOM 1436 N PRO A 98 127.854 -3.812 18.702 1.00 0.00  
ATOM 1437 CA PRO A 98 128.239 -5.063 19.366 1.00 0.00  
ATOM 1438 C PRO A 98 127.043 -5.789 19.971 1.00 0.00  
ATOM 1439 O PRO A 98 127.044 -7.014 20.094 1.00 0.00  
ATOM 1440 CB PRO A 98 129.197 -4.602 20.467 1.00 0.00  
ATOM 1441 CG PRO A 98 129.755 -3.315 19.969 1.00 0.00  
ATOM 1442 CD PRO A 98 128.656 -2.668 19.173 1.00 0.00  
ATOM 1443 HA PRO A 98 128.755 -5.726 18.689 1.00 0.00  
ATOM 1444 1HB PRO A 98 128.652 -4.467 21.389 1.00 0.00  
ATOM 1445 2HB PRO A 98 129.973 -5.341 20.605 1.00 0.00  
ATOM 1446 1HG PRO A 98 130.034 -2.688 20.803 1.00 0.00  
ATOM 1447 2HG PRO A 98 130.611 -3.505 19.338 1.00 0.00  
ATOM 1448 1HD PRO A 98 128.067 -2.017 19.803 1.00 0.00  
ATOM 1449 2HD PRO A 98 129.067 -2.117 18.340 1.00 0.00  
ATOM 1450 N SER A 99 126.021 -5.025 20.346 1.00 0.00  
ATOM 1451 CA SER A 99 124.818 -5.596 20.940 1.00 0.00  
ATOM 1452 C SER A 99 123.564 -4.983 20.323 1.00 0.00  
ATOM 1453 O SER A 99 123.584 -3.845 19.855 1.00 0.00  
ATOM 1454 CB SER A 99 124.815 -5.377 22.453 1.00 0.00  
ATOM 1455 OG SER A 99 125.417 -6.469 23.127 1.00 0.00  
ATOM 1456 H SER A 99 126.079 -4.054 20.222 1.00 0.00  
ATOM 1457 HA SER A 99 124.820 -6.657 20.738 1.00 0.00  
ATOM 1458 1HB SER A 99 125.367 -4.479 22.686 1.00 0.00  
ATOM 1459 2HB SER A 99 123.797 -5.273 22.798 1.00 0.00  
ATOM 1460 HG SER A 99 124.734 -7.021 23.516 1.00 0.00



ATOM 1461	N	GLY A 100	122.475	-5.744	20.327	1.00	0.00
ATOM 1462	CA	GLY A 100	121.229	-5.258	19.766	1.00	0.00
ATOM 1463	C	GLY A 100	120.594	-4.171	20.614	1.00	0.00
ATOM 1464	O	GLY A 100	120.434	-3.039	20.157	1.00	0.00
ATOM 1465	H	GLY A 100	122.518	-6.644	20.714	1.00	0.00
ATOM 1466	1HA	GLY A 100	121.420	-4.864	18.779	1.00	0.00
ATOM 1467	2HA	GLY A 100	120.537	-6.085	19.685	1.00	0.00
ATOM 1468	N	PRO A 101	120.221	-4.486	21.866	1.00	0.00
ATOM 1469	CA	PRO A 101	119.600	-3.515	22.773	1.00	0.00
ATOM 1470	C	PRO A 101	120.582	-2.443	23.233	1.00	0.00
ATOM 1471	O	PRO A 101	121.475	-2.709	24.038	1.00	0.00
ATOM 1472	CB	PRO A 101	119.150	-4.372	23.959	1.00	0.00
ATOM 1473	CG	PRO A 101	120.062	-5.549	23.942	1.00	0.00
ATOM 1474	CD	PRO A 101	120.374	-5.812	22.495	1.00	0.00
ATOM 1475	HA	PRO A 101	118.741	-3.043	22.319	1.00	0.00
ATOM 1476	1HB	PRO A 101	119.249	-3.806	24.873	1.00	0.00
ATOM 1477	2HB	PRO A 101	118.121	-4.669	23.821	1.00	0.00
ATOM 1478	1HG	PRO A 101	120.966	-5.320	24.485	1.00	0.00
ATOM 1479	2HG	PRO A 101	119.566	-6.403	24.379	1.00	0.00
ATOM 1480	1HD	PRO A 101	121.386	-6.175	22.387	1.00	0.00
ATOM 1481	2HD	PRO A 101	119.671	-6.518	22.079	1.00	0.00
ATOM 1482	N	SER A 102	120.410	-1.230	22.718	1.00	0.00
ATOM 1483	CA	SER A 102	121.282	-0.117	23.077	1.00	0.00
ATOM 1484	C	SER A 102	120.786	0.576	24.341	1.00	0.00
ATOM 1485	O	SER A 102	121.581	1.051	25.153	1.00	0.00
ATOM 1486	CB	SER A 102	121.358	0.889	21.926	1.00	0.00
ATOM 1487	OG	SER A 102	120.064	1.307	21.527	1.00	0.00
ATOM 1488	H	SER A 102	119.679	-1.080	22.081	1.00	0.00
ATOM 1489	HA	SER A 102	122.268	-0.515	23.261	1.00	0.00

ATOM 1490	1HB	SER A 102	121.918	1.755	22.245	1.00	0.00
ATOM 1491	2HB	SER A 102	121.851	0.430	21.082	1.00	0.00
ATOM 1492	HG	SER A 102	119.966	2.248	21.690	1.00	0.00
ATOM 1493	N	SER A 103	119.468	0.630	24.503	1.00	0.00
ATOM 1494	CA	SER A 103	118.867	1.265	25.670	1.00	0.00
ATOM 1495	C	SER A 103	119.270	0.543	26.952	1.00	0.00
ATOM 1496	O	SER A 103	118.782	-0.550	27.240	1.00	0.00
ATOM 1497	CB	SER A 103	117.343	1.283	25.539	1.00	0.00
ATOM 1498	OG	SER A 103	116.799	2.484	26.058	1.00	0.00
ATOM 1499	H	SER A 103	118.886	0.234	23.821	1.00	0.00
ATOM 1500	HA	SER A 103	119.226	2.282	25.716	1.00	0.00
ATOM 1501	1HB	SER A 103	117.073	1.202	24.497	1.00	0.00
ATOM 1502	2HB	SER A 103	116.927	0.448	26.083	1.00	0.00
ATOM 1503	HG	SER A 103	116.312	2.293	26.864	1.00	0.00
ATOM 1504	N	GLY A 104	120.165	1.160	27.717	1.00	0.00
ATOM 1505	CA	GLY A 104	120.618	0.561	28.957	1.00	0.00
ATOM 1506	C	GLY A 104	119.539	0.545	30.022	1.00	0.00
ATOM 1507	O	GLY A 104	119.748	-0.103	31.070	1.00	0.00
ATOM 1508	OXT	GLY A 104	118.485	1.179	29.809	1.00	0.00
ATOM 1509	H	GLY A 104	120.520	2.029	27.436	1.00	0.00
ATOM 1510	1HA	GLY A 104	120.930	-0.455	28.762	1.00	0.00
ATOM 1511	2HA	GLY A 104	121.464	1.121	29.327	1.00	0.00
TER 1512		GLY A 104					
ENDMDL							

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## 立体構造座標表 2

ATOM 1	N	GLY A	1	105.215	7.354	-0.195	1.00	0.00
ATOM 2	CA	GLY A	1	106.288	6.361	-0.481	1.00	0.00

ATOM 3	C	GLY A	1	107.290	6.250	0.651	1.00	0.00
ATOM 4	O	GLY A	1	107.077	6.795	1.734	1.00	0.00
ATOM 5	1H	GLY A	1	105.533	8.026	0.533	1.00	0.00
ATOM 6	2H	GLY A	1	104.360	6.869	0.147	1.00	0.00
ATOM 7	3H	GLY A	1	104.976	7.882	-1.060	1.00	0.00
ATOM 8	1HA	GLY A	1	105.834	5.395	-0.642	1.00	0.00
ATOM 9	2HA	GLY A	1	106.807	6.659	-1.380	1.00	0.00
ATOM 10	N	SER A	2	108.386	5.542	0.400	1.00	0.00
ATOM 11	CA	SER A	2	109.426	5.360	1.405	1.00	0.00
ATOM 12	C	SER A	2	110.256	6.629	1.565	1.00	0.00
ATOM 13	O	SER A	2	110.259	7.496	0.691	1.00	0.00
ATOM 14	CB	SER A	2	110.332	4.187	1.026	1.00	0.00
ATOM 15	OG	SER A	2	109.867	2.977	1.597	1.00	0.00
ATOM 16	H	SER A	2	108.498	5.132	-0.484	1.00	0.00
ATOM 17	HA	SER A	2	108.942	5.140	2.346	1.00	0.00
ATOM 18	1HB	SER A	2	110.348	4.080	-0.048	1.00	0.00
ATOM 19	2HB	SER A	2	111.334	4.379	1.384	1.00	0.00
ATOM 20	HG	SER A	2	110.095	2.955	2.530	1.00	0.00
ATOM 21	N	SER A	3	110.962	6.731	2.687	1.00	0.00
ATOM 22	CA	SER A	3	111.797	7.894	2.960	1.00	0.00
ATOM 23	C	SER A	3	113.078	7.853	2.131	1.00	0.00
ATOM 24	O	SER A	3	113.500	8.866	1.573	1.00	0.00
ATOM 25	CB	SER A	3	112.142	7.961	4.450	1.00	0.00
ATOM 26	OG	SER A	3	113.199	7.072	4.769	1.00	0.00
ATOM 27	H	SER A	3	110.920	6.008	3.346	1.00	0.00
ATOM 28	HA	SER A	3	111.237	8.777	2.690	1.00	0.00
ATOM 29	1HB	SER A	3	112.447	8.967	4.702	1.00	0.00
ATOM 30	2HB	SER A	3	111.272	7.692	5.031	1.00	0.00
ATOM 31	HG	SER A	3	112.849	6.184	4.872	1.00	0.00

ATOM 32	N	GLY A	4	113.690	6.676	2.056	1.00	0.00
ATOM 33	CA	GLY A	4	114.915	6.525	1.294	1.00	0.00
ATOM 34	C	GLY A	4	116.155	6.661	2.156	1.00	0.00
ATOM 35	O	GLY A	4	116.173	7.435	3.112	1.00	0.00
ATOM 36	H	GLY A	4	113.307	5.904	2.523	1.00	0.00
ATOM 37	1HA	GLY A	4	114.918	5.550	0.828	1.00	0.00
ATOM 38	2HA	GLY A	4	114.941	7.280	0.523	1.00	0.00
ATOM 39	N	SER A	5	117.194	5.905	1.817	1.00	0.00
ATOM 40	CA	SER A	5	118.444	5.943	2.567	1.00	0.00
ATOM 41	C	SER A	5	119.548	5.197	1.823	1.00	0.00
ATOM 42	O	SER A	5	119.739	3.997	2.018	1.00	0.00
ATOM 43	CB	SER A	5	118.248	5.336	3.957	1.00	0.00
ATOM 44	OG	SER A	5	117.949	3.954	3.871	1.00	0.00
ATOM 45	H	SER A	5	117.119	5.306	1.044	1.00	0.00
ATOM 46	HA	SER A	5	118.734	6.978	2.673	1.00	0.00
ATOM 47	1HB	SER A	5	119.154	5.461	4.533	1.00	0.00
ATOM 48	2HB	SER A	5	117.433	5.839	4.455	1.00	0.00
ATOM 49	HG	SER A	5	117.186	3.826	3.304	1.00	0.00
ATOM 50	N	SER A	6	120.271	5.917	0.971	1.00	0.00
ATOM 51	CA	SER A	6	121.355	5.322	0.198	1.00	0.00
ATOM 52	C	SER A	6	122.687	5.469	0.929	1.00	0.00
ATOM 53	O	SER A	6	123.365	6.489	0.805	1.00	0.00
ATOM 54	CB	SER A	6	121.443	5.975	-1.182	1.00	0.00
ATOM 55	OG	SER A	6	120.178	5.990	-1.821	1.00	0.00
ATOM 56	H	SER A	6	120.070	6.869	0.859	1.00	0.00
ATOM 57	HA	SER A	6	121.140	4.271	0.077	1.00	0.00
ATOM 58	1HB	SER A	6	121.790	6.992	-1.076	1.00	0.00
ATOM 59	2HB	SER A	6	122.137	5.420	-1.796	1.00	0.00
ATOM 60	HG	SER A	6	119.653	6.716	-1.475	1.00	0.00

ATOM 61	N	GLY A	7	123.055	4.444	1.688	1.00	0.00
ATOM 62	CA	GLY A	7	124.304	4.477	2.428	1.00	0.00
ATOM 63	C	GLY A	7	125.284	3.418	1.960	1.00	0.00
ATOM 64	O	GLY A	7	126.040	2.867	2.760	1.00	0.00
ATOM 65	H	GLY A	7	122.474	3.656	1.750	1.00	0.00
ATOM 66	1HA	GLY A	7	124.757	5.450	2.304	1.00	0.00
ATOM 67	2HA	GLY A	7	124.095	4.321	3.475	1.00	0.00
ATOM 68	N	LEU A	8	125.269	3.134	0.662	1.00	0.00
ATOM 69	CA	LEU A	8	126.163	2.134	0.089	1.00	0.00
ATOM 70	C	LEU A	8	127.308	2.798	-0.668	1.00	0.00
ATOM 71	O	LEU A	8	128.424	2.279	-0.705	1.00	0.00
ATOM 72	CB	LEU A	8	125.389	1.205	-0.847	1.00	0.00
ATOM 73	CG	LEU A	8	124.503	0.173	-0.148	1.00	0.00
ATOM 74	CD1	LEU A	8	123.307	-0.182	-1.018	1.00	0.00
ATOM 75	CD2	LEU A	8	125.306	-1.075	0.192	1.00	0.00
ATOM 76	H	LEU A	8	124.644	3.608	0.076	1.00	0.00
ATOM 77	HA	LEU A	8	126.573	1.553	0.901	1.00	0.00
ATOM 78	1HB	LEU A	8	124.763	1.811	-1.486	1.00	0.00
ATOM 79	2HB	LEU A	8	126.099	0.676	-1.465	1.00	0.00
ATOM 80	HG	LEU A	8	124.130	0.594	0.775	1.00	0.00
ATOM 81	1HD1	LEU A	8	122.467	-0.437	-0.390	1.00	0.00
ATOM 82	2HD1	LEU A	8	123.557	-1.026	-1.646	1.00	0.00
ATOM 83	3HD1	LEU A	8	123.050	0.664	-1.638	1.00	0.00
ATOM 84	1HD2	LEU A	8	124.669	-1.943	0.118	1.00	0.00
ATOM 85	2HD2	LEU A	8	125.689	-0.992	1.198	1.00	0.00
ATOM 86	3HD2	LEU A	8	126.129	-1.171	-0.500	1.00	0.00
ATOM 87	N	ALA A	9	127.025	3.949	-1.271	1.00	0.00
ATOM 88	CA	ALA A	9	128.032	4.684	-2.027	1.00	0.00
ATOM 89	C	ALA A	9	128.353	6.018	-1.362	1.00	0.00

ATOM 90	O	ALA A	9	127.467	6.685	-0.828	1.00	0.00
ATOM 91	CB	ALA A	9	127.559	4.904	-3.456	1.00	0.00
ATOM 92	H	ALA A	9	126.117	4.312	-1.204	1.00	0.00
ATOM 93	HA	ALA A	9	128.930	4.083	-2.058	1.00	0.00
ATOM 94	1HB	ALA A	9	126.948	4.070	-3.766	1.00	0.00
ATOM 95	2HB	ALA A	9	128.415	4.986	-4.110	1.00	0.00
ATOM 96	3HB	ALA A	9	126.979	5.813	-3.507	1.00	0.00
ATOM 97	N	MET A	10	129.625	6.399	-1.399	1.00	0.00
ATOM 98	CA	MET A	10	130.064	7.654	-0.799	1.00	0.00
ATOM 99	C	MET A	10	131.140	8.320	-1.656	1.00	0.00
ATOM 100	O	MET A	10	132.329	8.052	-1.490	1.00	0.00
ATOM 101	CB	MET A	10	130.601	7.410	0.612	1.00	0.00
ATOM 102	CG	MET A	10	129.515	7.117	1.634	1.00	0.00
ATOM 103	SD	MET A	10	130.052	5.956	2.905	1.00	0.00
ATOM 104	CE	MET A	10	128.479	5.283	3.435	1.00	0.00
ATOM 105	H	MET A	10	130.285	5.823	-1.839	1.00	0.00
ATOM 106	HA	MET A	10	129.209	8.311	-0.740	1.00	0.00
ATOM 107	1HB	MET A	10	131.277	6.568	0.586	1.00	0.00
ATOM 108	2HB	MET A	10	131.144	8.286	0.935	1.00	0.00
ATOM 109	1HG	MET A	10	129.229	8.043	2.110	1.00	0.00
ATOM 110	2HG	MET A	10	128.661	6.699	1.121	1.00	0.00
ATOM 111	1HE	MET A	10	127.696	6.001	3.239	1.00	0.00
ATOM 112	2HE	MET A	10	128.516	5.071	4.493	1.00	0.00
ATOM 113	3HE	MET A	10	128.277	4.371	2.892	1.00	0.00
ATOM 114	N	PRO A	11	130.733	9.201	-2.588	1.00	0.00
ATOM 115	CA	PRO A	11	131.672	9.903	-3.467	1.00	0.00
ATOM 116	C	PRO A	11	132.708	10.710	-2.687	1.00	0.00
ATOM 117	O	PRO A	11	133.901	10.639	-2.976	1.00	0.00
ATOM 118	CB	PRO A	11	130.781	10.836	-4.295	1.00	0.00

ATOM 119	CG	PRO A	11	129.406	10.270	-4.185	1.00	0.00
ATOM 120	CD	PRO A	11	129.335	9.581	-2.851	1.00	0.00
ATOM 121	HA	PRO A	11	132.181	9.214	-4.125	1.00	0.00
ATOM 122	1HB	PRO A	11	130.831	11.836	-3.892	1.00	0.00
ATOM 123	2HB	PRO A	11	131.120	10.841	-5.321	1.00	0.00
ATOM 124	1HG	PRO A	11	128.680	11.066	-4.229	1.00	0.00
ATOM 125	2HG	PRO A	11	129.236	9.561	-4.981	1.00	0.00
ATOM 126	1HD	PRO A	11	128.971	10.260	-2.095	1.00	0.00
ATOM 127	2HD	PRO A	11	128.704	8.707	-2.911	1.00	0.00
ATOM 128	N	PRO A	12	132.269	11.487	-1.678	1.00	0.00
ATOM 129	CA	PRO A	12	133.179	12.297	-0.861	1.00	0.00
ATOM 130	C	PRO A	12	134.284	11.455	-0.232	1.00	0.00
ATOM 131	O	PRO A	12	135.340	11.970	0.133	1.00	0.00
ATOM 132	CB	PRO A	12	132.272	12.882	0.225	1.00	0.00
ATOM 133	CG	PRO A	12	130.903	12.847	-0.360	1.00	0.00
ATOM 134	CD	PRO A	12	130.866	11.636	-1.249	1.00	0.00
ATOM 135	HA	PRO A	12	133.622	13.096	-1.437	1.00	0.00
ATOM 136	1HB	PRO A	12	132.336	12.276	1.117	1.00	0.00
ATOM 137	2HB	PRO A	12	132.579	13.893	0.447	1.00	0.00
ATOM 138	1HG	PRO A	12	130.170	12.758	0.426	1.00	0.00
ATOM 139	2HG	PRO A	12	130.728	13.741	-0.940	1.00	0.00
ATOM 140	1HD	PRO A	12	130.539	10.770	-0.691	1.00	0.00
ATOM 141	2HD	PRO A	12	130.219	11.809	-2.094	1.00	0.00
ATOM 142	N	GLY A	13	134.030	10.155	-0.108	1.00	0.00
ATOM 143	CA	GLY A	13	135.012	9.261	0.477	1.00	0.00
ATOM 144	C	GLY A	13	135.208	7.999	-0.339	1.00	0.00
ATOM 145	O	GLY A	13	135.145	6.891	0.193	1.00	0.00
ATOM 146	H	GLY A	13	133.170	9.800	-0.417	1.00	0.00
ATOM 147	1HA	GLY A	13	135.957	9.779	0.552	1.00	0.00

ATOM 148	2HA	GLY A	13	134.686	8.986	1.470	1.00	0.00
ATOM 149	N	ASN A	14	135.447	8.169	-1.638	1.00	0.00
ATOM 150	CA	ASN A	14	135.654	7.038	-2.536	1.00	0.00
ATOM 151	C	ASN A	14	134.405	6.163	-2.612	1.00	0.00
ATOM 152	O	ASN A	14	133.628	6.256	-3.562	1.00	0.00
ATOM 153	CB	ASN A	14	136.854	6.205	-2.078	1.00	0.00
ATOM 154	CG	ASN A	14	138.169	6.936	-2.265	1.00	0.00
ATOM 155	OD1	ASN A	14	138.694	7.023	-3.375	1.00	0.00
ATOM 156	ND2	ASN A	14	138.711	7.466	-1.173	1.00	0.00
ATOM 157	H	ASN A	14	135.485	9.078	-2.000	1.00	0.00
ATOM 158	HA	ASN A	14	135.858	7.433	-3.520	1.00	0.00
ATOM 159	1HB	ASN A	14	136.742	5.965	-1.032	1.00	0.00
ATOM 160	2HB	ASN A	14	136.888	5.290	-2.652	1.00	0.00
ATOM 161	1HD2	ASN A	14	138.237	7.357	-0.322	1.00	0.00
ATOM 162	2HD2	ASN A	14	139.561	7.945	-1.264	1.00	0.00
ATOM 163	N	SER A	15	134.219	5.312	-1.607	1.00	0.00
ATOM 164	CA	SER A	15	133.065	4.422	-1.564	1.00	0.00
ATOM 165	C	SER A	15	132.542	4.276	-0.139	1.00	0.00
ATOM 166	O	SER A	15	131.340	4.379	0.107	1.00	0.00
ATOM 167	CB	SER A	15	133.432	3.048	-2.127	1.00	0.00
ATOM 168	OG	SER A	15	132.293	2.391	-2.653	1.00	0.00
ATOM 169	H	SER A	15	134.872	5.282	-0.878	1.00	0.00
ATOM 170	HA	SER A	15	132.289	4.856	-2.176	1.00	0.00
ATOM 171	1HB	SER A	15	134.159	3.167	-2.917	1.00	0.00
ATOM 172	2HB	SER A	15	133.853	2.439	-1.340	1.00	0.00
ATOM 173	HG	SER A	15	131.783	3.007	-3.183	1.00	0.00
ATOM 174	N	HIS A	16	133.453	4.036	0.799	1.00	0.00
ATOM 175	CA	HIS A	16	133.084	3.876	2.201	1.00	0.00
ATOM 176	C	HIS A	16	133.923	4.787	3.092	1.00	0.00



ATOM 177	O	HIS A	16	133.400	5.454	3.984	1.00	0.00
ATOM 178	CB	HIS A	16	133.259	2.420	2.633	1.00	0.00
ATOM 179	CG	HIS A	16	132.025	1.591	2.457	1.00	0.00
ATOM 180	ND1	HIS A	16	131.474	0.835	3.472	1.00	0.00
ATOM 181	CD2	HIS A	16	131.232	1.401	1.377	1.00	0.00
ATOM 182	CE1	HIS A	16	130.397	0.216	3.023	1.00	0.00
ATOM 183	NE2	HIS A	16	130.227	0.543	1.755	1.00	0.00
ATOM 184	H	HIS A	16	134.396	3.965	0.542	1.00	0.00
ATOM 185	HA	HIS A	16	132.045	4.150	2.304	1.00	0.00
ATOM 186	1HB	HIS A	16	134.047	1.970	2.047	1.00	0.00
ATOM 187	2HB	HIS A	16	133.534	2.391	3.678	1.00	0.00
ATOM 188	HD1	HIS A	16	131.822	0.763	4.385	1.00	0.00
ATOM 189	HD2	HIS A	16	131.363	1.841	0.399	1.00	0.00
ATOM 190	HE1	HIS A	16	129.763	-0.444	3.596	1.00	0.00
ATOM 191	HE2	HIS A	16	129.457	0.291	1.205	1.00	0.00
ATOM 192	N	GLY A	17	135.229	4.809	2.843	1.00	0.00
ATOM 193	CA	GLY A	17	136.120	5.641	3.630	1.00	0.00
ATOM 194	C	GLY A	17	137.532	5.092	3.679	1.00	0.00
ATOM 195	O	GLY A	17	138.032	4.742	4.748	1.00	0.00
ATOM 196	H	GLY A	17	135.589	4.257	2.119	1.00	0.00
ATOM 197	1HA	GLY A	17	136.145	6.631	3.200	1.00	0.00
ATOM 198	2HA	GLY A	17	135.736	5.707	4.637	1.00	0.00
ATOM 199	N	LEU A	18	138.175	5.015	2.519	1.00	0.00
ATOM 200	CA	LEU A	18	139.539	4.503	2.434	1.00	0.00
ATOM 201	C	LEU A	18	140.547	5.574	2.836	1.00	0.00
ATOM 202	O	LEU A	18	140.918	6.426	2.029	1.00	0.00
ATOM 203	CB	LEU A	18	139.833	4.014	1.015	1.00	0.00
ATOM 204	CG	LEU A	18	138.730	3.165	0.380	1.00	0.00
ATOM 205	CD1	LEU A	18	138.853	3.178	-1.136	1.00	0.00

ATOM 206	CD2	LEU A	18	138.786	1.740	0.909	1.00	0.00
ATOM 207	H	LEU A	18	137.723	5.308	1.701	1.00	0.00
ATOM 208	HA	LEU A	18	139.623	3.672	3.116	1.00	0.00
ATOM 209	1HB	LEU A	18	140.002	4.877	0.387	1.00	0.00
ATOM 210	2HB	LEU A	18	140.739	3.426	1.040	1.00	0.00
ATOM 211	HG	LEU A	18	137.769	3.583	0.641	1.00	0.00
ATOM 212	1HD1	LEU A	18	139.875	2.973	-1.416	1.00	0.00
ATOM 213	2HD1	LEU A	18	138.564	4.149	-1.512	1.00	0.00
ATOM 214	3HD1	LEU A	18	138.205	2.423	-1.556	1.00	0.00
ATOM 215	1HD2	LEU A	18	137.874	1.224	0.648	1.00	0.00
ATOM 216	2HD2	LEU A	18	138.895	1.758	1.983	1.00	0.00
ATOM 217	3HD2	LEU A	18	139.629	1.226	0.470	1.00	0.00
ATOM 218	N	GLU A	19	140.988	5.523	4.088	1.00	0.00
ATOM 219	CA	GLU A	19	141.956	6.488	4.598	1.00	0.00
ATOM 220	C	GLU A	19	143.006	5.799	5.464	1.00	0.00
ATOM 221	O	GLU A	19	142.962	4.585	5.662	1.00	0.00
ATOM 222	CB	GLU A	19	141.246	7.576	5.405	1.00	0.00
ATOM 223	CG	GLU A	19	140.290	7.030	6.453	1.00	0.00
ATOM 224	CD	GLU A	19	140.046	8.008	7.586	1.00	0.00
ATOM 225	OE1	GLU A	19	139.639	7.561	8.679	1.00	0.00
ATOM 226	OE2	GLU A	19	140.261	9.220	7.380	1.00	0.00
ATOM 227	H	GLU A	19	140.656	4.819	4.684	1.00	0.00
ATOM 228	HA	GLU A	19	142.447	6.944	3.751	1.00	0.00
ATOM 229	1HB	GLU A	19	141.989	8.180	5.907	1.00	0.00
ATOM 230	2HB	GLU A	19	140.683	8.202	4.728	1.00	0.00
ATOM 231	1HG	GLU A	19	139.345	6.807	5.981	1.00	0.00
ATOM 232	2HG	GLU A	19	140.708	6.122	6.864	1.00	0.00
ATOM 233	N	VAL A	20	143.949	6.582	5.978	1.00	0.00
ATOM 234	CA	VAL A	20	145.009	6.047	6.822	1.00	0.00

ATOM 235	C	VAL A	20	144.435	5.407	8.082	1.00	0.00
ATOM 236	O	VAL A	20	143.542	5.963	8.722	1.00	0.00
ATOM 237	CB	VAL A	20	146.013	7.144	7.229	1.00	0.00
ATOM 238	CG1	VAL A	20	147.191	6.540	7.979	1.00	0.00
ATOM 239	CG2	VAL A	20	146.489	7.914	6.004	1.00	0.00
ATOM 240	H	VAL A	20	143.931	7.543	5.783	1.00	0.00
ATOM 241	HA	VAL A	20	145.539	5.294	6.257	1.00	0.00
ATOM 242	HB	VAL A	20	145.512	7.835	7.889	1.00	0.00
ATOM 243	1HG1	VAL A	20	147.488	5.618	7.501	1.00	0.00
ATOM 244	2HG1	VAL A	20	146.903	6.341	9.000	1.00	0.00
ATOM 245	3HG1	VAL A	20	148.019	7.235	7.967	1.00	0.00
ATOM 246	1HG2	VAL A	20	147.486	7.592	5.743	1.00	0.00
ATOM 247	2HG2	VAL A	20	146.498	8.971	6.226	1.00	0.00
ATOM 248	3HG2	VAL A	20	145.821	7.726	5.177	1.00	0.00
ATOM 249	N	GLY A	21	144.954	4.234	8.432	1.00	0.00
ATOM 250	CA	GLY A	21	144.482	3.538	9.615	1.00	0.00
ATOM 251	C	GLY A	21	143.450	2.476	9.287	1.00	0.00
ATOM 252	O	GLY A	21	143.375	1.447	9.959	1.00	0.00
ATOM 253	H	GLY A	21	145.665	3.840	7.885	1.00	0.00
ATOM 254	1HA	GLY A	21	145.323	3.069	10.104	1.00	0.00
ATOM 255	2HA	GLY A	21	144.039	4.256	10.290	1.00	0.00
ATOM 256	N	SER A	22	142.655	2.725	8.253	1.00	0.00
ATOM 257	CA	SER A	22	141.623	1.781	7.837	1.00	0.00
ATOM 258	C	SER A	22	142.196	0.728	6.895	1.00	0.00
ATOM 259	O	SER A	22	143.138	0.996	6.147	1.00	0.00
ATOM 260	CB	SER A	22	140.471	2.521	7.154	1.00	0.00
ATOM 261	OG	SER A	22	140.308	3.821	7.694	1.00	0.00
ATOM 262	H	SER A	22	142.764	3.562	7.756	1.00	0.00
ATOM 263	HA	SER A	22	141.249	1.289	8.722	1.00	0.00

ATOM 264	1HB	SER A	22	140.678	2.607	6.098	1.00	0.00
ATOM 265	2HB	SER A	22	139.556	1.967	7.298	1.00	0.00
ATOM 266	HG	SER A	22	140.349	3.777	8.653	1.00	0.00
ATOM 267	N	LEU A	23	141.624	-0.470	6.936	1.00	0.00
ATOM 268	CA	LEU A	23	142.078	-1.564	6.086	1.00	0.00
ATOM 269	C	LEU A	23	141.426	-1.492	4.709	1.00	0.00
ATOM 270	O	LEU A	23	140.229	-1.231	4.590	1.00	0.00
ATOM 271	CB	LEU A	23	141.763	-2.911	6.740	1.00	0.00
ATOM 272	CG	LEU A	23	142.577	-3.225	7.997	1.00	0.00
ATOM 273	CD1	LEU A	23	141.779	-4.108	8.943	1.00	0.00
ATOM 274	CD2	LEU A	23	143.893	-3.892	7.624	1.00	0.00
ATOM 275	H	LEU A	23	140.877	-0.622	7.552	1.00	0.00
ATOM 276	HA	LEU A	23	143.148	-1.472	5.970	1.00	0.00
ATOM 277	1HB	LEU A	23	140.716	-2.923	7.003	1.00	0.00
ATOM 278	2HB	LEU A	23	141.945	-3.691	6.017	1.00	0.00
ATOM 279	HG	LEU A	23	142.803	-2.303	8.512	1.00	0.00
ATOM 280	1HD1	LEU A	23	141.062	-4.686	8.378	1.00	0.00
ATOM 281	2HD1	LEU A	23	141.259	-3.490	9.659	1.00	0.00
ATOM 282	3HD1	LEU A	23	142.449	-4.777	9.464	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.706	-4.908	7.309	1.00	0.00
ATOM 284	2HD2	LEU A	23	144.550	-3.897	8.481	1.00	0.00
ATOM 285	3HD2	LEU A	23	144.359	-3.345	6.818	1.00	0.00
ATOM 286	N	ALA A	24	142.222	-1.725	3.670	1.00	0.00
ATOM 287	CA	ALA A	24	141.724	-1.686	2.301	1.00	0.00
ATOM 288	C	ALA A	24	142.324	-2.812	1.466	1.00	0.00
ATOM 289	O	ALA A	24	143.420	-3.294	1.751	1.00	0.00
ATOM 290	CB	ALA A	24	142.028	-0.337	1.667	1.00	0.00
ATOM 291	H	ALA A	24	143.168	-1.928	3.829	1.00	0.00
ATOM 292	HA	ALA A	24	140.651	-1.808	2.334	1.00	0.00

ATOM 293	1HB	ALA	A	24	141.196	0.333	1.830	1.00	0.00
ATOM 294	2HB	ALA	A	24	142.184	-0.464	0.606	1.00	0.00
ATOM 295	3HB	ALA	A	24	142.919	0.079	2.115	1.00	0.00
ATOM 296	N	GLU	A	25	141.598	-3.227	0.433	1.00	0.00
ATOM 297	CA	GLU	A	25	142.059	-4.299	-0.445	1.00	0.00
ATOM 298	C	GLU	A	25	142.225	-3.797	-1.876	1.00	0.00
ATOM 299	O	GLU	A	25	141.447	-2.968	-2.348	1.00	0.00
ATOM 300	CB	GLU	A	25	141.075	-5.470	-0.414	1.00	0.00
ATOM 301	CG	GLU	A	25	141.514	-6.654	-1.260	1.00	0.00
ATOM 302	CD	GLU	A	25	140.767	-6.737	-2.578	1.00	0.00
ATOM 303	OE1	GLU	A	25	140.490	-5.674	-3.170	1.00	0.00
ATOM 304	OE2	GLU	A	25	140.461	-7.865	-3.017	1.00	0.00
ATOM 305	H	GLU	A	25	140.732	-2.805	0.256	1.00	0.00
ATOM 306	HA	GLU	A	25	143.017	-4.636	-0.081	1.00	0.00
ATOM 307	1HB	GLU	A	25	140.965	-5.805	0.607	1.00	0.00
ATOM 308	2HB	GLU	A	25	140.117	-5.130	-0.778	1.00	0.00
ATOM 309	1HG	GLU	A	25	142.569	-6.561	-1.469	1.00	0.00
ATOM 310	2HG	GLU	A	25	141.335	-7.563	-0.704	1.00	0.00
ATOM 311	N	VAL	A	26	143.244	-4.305	-2.560	1.00	0.00
ATOM 312	CA	VAL	A	26	143.513	-3.909	-3.937	1.00	0.00
ATOM 313	C	VAL	A	26	142.949	-4.926	-4.922	1.00	0.00
ATOM 314	O	VAL	A	26	142.719	-6.084	-4.571	1.00	0.00
ATOM 315	CB	VAL	A	26	145.024	-3.751	-4.191	1.00	0.00
ATOM 316	CG1	VAL	A	26	145.275	-3.136	-5.559	1.00	0.00
ATOM 317	CG2	VAL	A	26	145.665	-2.911	-3.097	1.00	0.00
ATOM 318	H	VAL	A	26	143.830	-4.962	-2.129	1.00	0.00
ATOM 319	HA	VAL	A	26	143.039	-2.953	-4.109	1.00	0.00
ATOM 320	HB	VAL	A	26	145.477	-4.731	-4.173	1.00	0.00
ATOM 321	1HG1	VAL	A	26	146.222	-2.616	-5.553	1.00	0.00

ATOM 322	2HG1	VAL A	26	144.484	-2.439	-5.792	1.00	0.00
ATOM 323	3HG1	VAL A	26	145.299	-3.917	-6.305	1.00	0.00
ATOM 324	1HG2	VAL A	26	145.381	-1.876	-3.223	1.00	0.00
ATOM 325	2HG2	VAL A	26	146.740	-2.998	-3.157	1.00	0.00
ATOM 326	3HG2	VAL A	26	145.330	-3.260	-2.131	1.00	0.00
ATOM 327	N	LYS A	27	142.727	-4.487	-6.157	1.00	0.00
ATOM 328	CA	LYS A	27	142.188	-5.360	-7.194	1.00	0.00
ATOM 329	C	LYS A	27	143.310	-5.966	-8.031	1.00	0.00
ATOM 330	O	LYS A	27	143.259	-5.951	-9.262	1.00	0.00
ATOM 331	CB	LYS A	27	141.223	-4.583	-8.092	1.00	0.00
ATOM 332	CG	LYS A	27	139.924	-4.202	-7.403	1.00	0.00
ATOM 333	CD	LYS A	27	139.048	-5.419	-7.154	1.00	0.00
ATOM 334	CE	LYS A	27	137.646	-5.018	-6.724	1.00	0.00
ATOM 335	NZ	LYS A	27	137.102	-5.932	-5.682	1.00	0.00
ATOM 336	H	LYS A	27	142.930	-3.554	-6.376	1.00	0.00
ATOM 337	HA	LYS A	27	141.648	-6.158	-6.706	1.00	0.00
ATOM 338	1HB	LYS A	27	141.710	-3.677	-8.424	1.00	0.00
ATOM 339	2HB	LYS A	27	140.985	-5.190	-8.954	1.00	0.00
ATOM 340	1HG	LYS A	27	140.152	-3.735	-6.457	1.00	0.00
ATOM 341	2HG	LYS A	27	139.387	-3.504	-8.030	1.00	0.00
ATOM 342	1HD	LYS A	27	138.983	-5.995	-8.065	1.00	0.00
ATOM 343	2HD	LYS A	27	139.496	-6.019	-6.376	1.00	0.00
ATOM 344	1HE	LYS A	27	137.678	-4.014	-6.327	1.00	0.00
ATOM 345	2HE	LYS A	27	136.998	-5.043	-7.587	1.00	0.00
ATOM 346	1HZ	LYS A	27	136.733	-6.799	-6.124	1.00	0.00
ATOM 347	2HZ	LYS A	27	136.331	-5.466	-5.163	1.00	0.00
ATOM 348	3HZ	LYS A	27	137.851	-6.192	-5.007	1.00	0.00
ATOM 349	N	GLU A	28	144.323	-6.501	-7.357	1.00	0.00
ATOM 350	CA	GLU A	28	145.457	-7.112	-8.038	1.00	0.00

ATOM 351	C	GLU A	28	145.269	-8.622	-8.160	1.00	0.00
ATOM 352	O	GLU A	28	144.303	-9.181	-7.640	1.00	0.00
ATOM 353	CB	GLU A	28	146.756	-6.806	-7.288	1.00	0.00
ATOM 354	CG	GLU A	28	147.863	-6.272	-8.182	1.00	0.00
ATOM 355	CD	GLU A	28	149.224	-6.837	-7.824	1.00	0.00
ATOM 356	OE1	GLU A	28	149.635	-7.835	-8.452	1.00	0.00
ATOM 357	OE2	GLU A	28	149.878	-6.281	-6.917	1.00	0.00
ATOM 358	H	GLU A	28	144.307	-6.483	-6.377	1.00	0.00
ATOM 359	HA	GLU A	28	145.516	-6.688	-9.029	1.00	0.00
ATOM 360	1HB	GLU A	28	146.552	-6.068	-6.526	1.00	0.00
ATOM 361	2HB	GLU A	28	147.110	-7.711	-6.814	1.00	0.00
ATOM 362	1HG	GLU A	28	147.640	-6.533	-9.205	1.00	0.00
ATOM 363	2HG	GLU A	28	147.899	-5.197	-8.085	1.00	0.00
ATOM 364	N	ASN A	29	146.199	-9.275	-8.850	1.00	0.00
ATOM 365	CA	ASN A	29	146.136	-10.719	-9.040	1.00	0.00
ATOM 366	C	ASN A	29	146.156	-11.446	-7.697	1.00	0.00
ATOM 367	O	ASN A	29	145.239	-12.204	-7.381	1.00	0.00
ATOM 368	CB	ASN A	29	147.306	-11.191	-9.907	1.00	0.00
ATOM 369	CG	ASN A	29	146.930	-11.306	-11.371	1.00	0.00
ATOM 370	OD1	ASN A	29	146.786	-12.407	-11.903	1.00	0.00
ATOM 371	ND2	ASN A	29	146.767	-10.165	-12.032	1.00	0.00
ATOM 372	H	ASN A	29	146.944	-8.773	-9.240	1.00	0.00
ATOM 373	HA	ASN A	29	145.211	-10.947	-9.546	1.00	0.00
ATOM 374	1HB	ASN A	29	148.119	-10.486	-9.819	1.00	0.00
ATOM 375	2HB	ASN A	29	147.635	-12.160	-9.561	1.00	0.00
ATOM 376	1HD2	ASN A	29	146.898	-9.325	-11.543	1.00	0.00
ATOM 377	2HD2	ASN A	29	146.524	-10.210	-12.979	1.00	0.00
ATOM 378	N	PRO A	30	147.206	-11.226	-6.887	1.00	0.00
ATOM 379	CA	PRO A	30	147.337	-11.863	-5.575	1.00	0.00

ATOM 380	C	PRO A	30	146.420	-11.233	-4.529	1.00	0.00
ATOM 381	O	PRO A	30	146.641	-10.098	-4.105	1.00	0.00
ATOM 382	CB	PRO A	30	148.802	-11.621	-5.217	1.00	0.00
ATOM 383	CG	PRO A	30	149.156	-10.354	-5.917	1.00	0.00
ATOM 384	CD	PRO A	30	148.346	-10.336	-7.187	1.00	0.00
ATOM 385	HA	PRO A	30	147.149	-12.925	-5.631	1.00	0.00
ATOM 386	1HB	PRO A	30	148.902	-11.522	-4.145	1.00	0.00
ATOM 387	2HB	PRO A	30	149.404	-12.446	-5.567	1.00	0.00
ATOM 388	1HG	PRO A	30	148.897	-9.508	-5.296	1.00	0.00
ATOM 389	2HG	PRO A	30	150.211	-10.344	-6.145	1.00	0.00
ATOM 390	1HD	PRO A	30	148.006	-9.335	-7.401	1.00	0.00
ATOM 391	2HD	PRO A	30	148.927	-10.721	-8.009	1.00	0.00
ATOM 392	N	PRO A	31	145.373	-11.959	-4.095	1.00	0.00
ATOM 393	CA	PRO A	31	144.428	-11.455	-3.094	1.00	0.00
ATOM 394	C	PRO A	31	145.065	-11.310	-1.717	1.00	0.00
ATOM 395	O	PRO A	31	144.943	-12.193	-0.869	1.00	0.00
ATOM 396	CB	PRO A	31	143.331	-12.523	-3.065	1.00	0.00
ATOM 397	CG	PRO A	31	143.999	-13.765	-3.541	1.00	0.00
ATOM 398	CD	PRO A	31	145.028	-13.322	-4.543	1.00	0.00
ATOM 399	HA	PRO A	31	144.003	-10.507	-3.393	1.00	0.00
ATOM 400	1HB	PRO A	31	142.960	-12.634	-2.057	1.00	0.00
ATOM 401	2HB	PRO A	31	142.524	-12.233	-3.721	1.00	0.00
ATOM 402	1HG	PRO A	31	144.474	-14.268	-2.712	1.00	0.00
ATOM 403	2HG	PRO A	31	143.276	-14.415	-4.011	1.00	0.00
ATOM 404	1HD	PRO A	31	145.892	-13.969	-4.508	1.00	0.00
ATOM 405	2HD	PRO A	31	144.607	-13.306	-5.536	1.00	0.00
ATOM 406	N	PHE A	32	145.746	-10.189	-1.501	1.00	0.00
ATOM 407	CA	PHE A	32	146.404	-9.928	-0.226	1.00	0.00
ATOM 408	C	PHE A	32	145.573	-8.975	0.628	1.00	0.00



ATOM 409	O	PHE A	32	144.568	-8.432	0.172	1.00	0.00
ATOM 410	CB	PHE A	32	147.798	-9.342	-0.457	1.00	0.00
ATOM 411	CG	PHE A	32	147.825	-8.245	-1.484	1.00	0.00
ATOM 412	CD1	PHE A	32	147.160	-7.051	-1.259	1.00	0.00
ATOM 413	CD2	PHE A	32	148.516	-8.409	-2.674	1.00	0.00
ATOM 414	CE1	PHE A	32	147.184	-6.040	-2.201	1.00	0.00
ATOM 415	CE2	PHE A	32	148.543	-7.402	-3.620	1.00	0.00
ATOM 416	CZ	PHE A	32	147.875	-6.216	-3.383	1.00	0.00
ATOM 417	H	PHE A	32	145.807	-9.522	-2.217	1.00	0.00
ATOM 418	HA	PHE A	32	146.501	-10.868	0.295	1.00	0.00
ATOM 419	1HB	PHE A	32	148.168	-8.935	0.471	1.00	0.00
ATOM 420	2HB	PHE A	32	148.460	-10.127	-0.791	1.00	0.00
ATOM 421	HD1	PHE A	32	146.618	-6.912	-0.335	1.00	0.00
ATOM 422	HD2	PHE A	32	149.038	-9.336	-2.860	1.00	0.00
ATOM 423	HE1	PHE A	32	146.660	-5.114	-2.014	1.00	0.00
ATOM 424	HE2	PHE A	32	149.085	-7.543	-4.543	1.00	0.00
ATOM 425	HZ	PHE A	32	147.895	-5.428	-4.122	1.00	0.00
ATOM 426	N	TYR A	33	146.003	-8.777	1.870	1.00	0.00
ATOM 427	CA	TYR A	33	145.297	-7.889	2.789	1.00	0.00
ATOM 428	C	TYR A	33	146.273	-6.965	3.508	1.00	0.00
ATOM 429	O	TYR A	33	147.259	-7.417	4.092	1.00	0.00
ATOM 430	CB	TYR A	33	144.502	-8.706	3.809	1.00	0.00
ATOM 431	CG	TYR A	33	143.206	-9.261	3.263	1.00	0.00
ATOM 432	CD1	TYR A	33	142.351	-8.466	2.509	1.00	0.00
ATOM 433	CD2	TYR A	33	142.838	-10.579	3.501	1.00	0.00
ATOM 434	CE1	TYR A	33	141.165	-8.970	2.008	1.00	0.00
ATOM 435	CE2	TYR A	33	141.655	-11.090	3.002	1.00	0.00
ATOM 436	CZ	TYR A	33	140.822	-10.282	2.257	1.00	0.00
ATOM 437	OH	TYR A	33	139.643	-10.787	1.759	1.00	0.00

ATOM 438	H	TYR A	33	146.811	-9.238	2.178	1.00	0.00
ATOM 439	HA	TYR A	33	144.613	-7.289	2.208	1.00	0.00
ATOM 440	1HB	TYR A	33	145.104	-9.537	4.143	1.00	0.00
ATOM 441	2HB	TYR A	33	144.264	-8.077	4.655	1.00	0.00
ATOM 442	HD1	TYR A	33	142.623	-7.439	2.316	1.00	0.00
ATOM 443	HD2	TYR A	33	143.492	-11.209	4.086	1.00	0.00
ATOM 444	HE1	TYR A	33	140.515	-8.336	1.424	1.00	0.00
ATOM 445	HE2	TYR A	33	141.386	-12.117	3.198	1.00	0.00
ATOM 446	HH	TYR A	33	139.504	-10.457	0.869	1.00	0.00
ATOM 447	N	GLY A	34	145.993	-5.666	3.463	1.00	0.00
ATOM 448	CA	GLY A	34	146.856	-4.698	4.115	1.00	0.00
ATOM 449	C	GLY A	34	146.086	-3.512	4.663	1.00	0.00
ATOM 450	O	GLY A	34	144.877	-3.403	4.464	1.00	0.00
ATOM 451	H	GLY A	34	145.194	-5.363	2.983	1.00	0.00
ATOM 452	1HA	GLY A	34	147.374	-5.184	4.928	1.00	0.00
ATOM 453	2HA	GLY A	34	147.583	-4.342	3.400	1.00	0.00
ATOM 454	N	VAL A	35	146.789	-2.622	5.357	1.00	0.00
ATOM 455	CA	VAL A	35	146.165	-1.439	5.937	1.00	0.00
ATOM 456	C	VAL A	35	146.791	-0.162	5.382	1.00	0.00
ATOM 457	O	VAL A	35	147.999	-0.097	5.159	1.00	0.00
ATOM 458	CB	VAL A	35	146.287	-1.437	7.474	1.00	0.00
ATOM 459	CG1	VAL A	35	147.746	-1.405	7.899	1.00	0.00
ATOM 460	CG2	VAL A	35	145.523	-0.263	8.071	1.00	0.00
ATOM 461	H	VAL A	35	147.751	-2.766	5.482	1.00	0.00
ATOM 462	HA	VAL A	35	145.116	-1.455	5.679	1.00	0.00
ATOM 463	HB	VAL A	35	145.847	-2.350	7.849	1.00	0.00
ATOM 464	1HG1	VAL A	35	148.023	-0.395	8.165	1.00	0.00
ATOM 465	2HG1	VAL A	35	148.367	-1.745	7.084	1.00	0.00
ATOM 466	3HG1	VAL A	35	147.888	-2.052	8.752	1.00	0.00

ATOM 467	1HG2	VAL	A	35	144.502	-0.284	7.721	1.00	0.00
ATOM 468	2HG2	VAL	A	35	145.989	0.662	7.765	1.00	0.00
ATOM 469	3HG2	VAL	A	35	145.537	-0.335	9.148	1.00	0.00
ATOM 470	N	ILE	A	36	145.958	0.852	5.164	1.00	0.00
ATOM 471	CA	ILE	A	36	146.430	2.126	4.637	1.00	0.00
ATOM 472	C	ILE	A	36	147.393	2.798	5.611	1.00	0.00
ATOM 473	O	ILE	A	36	147.154	2.821	6.819	1.00	0.00
ATOM 474	CB	ILE	A	36	145.259	3.085	4.344	1.00	0.00
ATOM 475	CG1	ILE	A	36	144.203	2.391	3.480	1.00	0.00
ATOM 476	CG2	ILE	A	36	145.765	4.346	3.658	1.00	0.00
ATOM 477	CD1	ILE	A	36	143.021	3.272	3.144	1.00	0.00
ATOM 478	H	ILE	A	36	145.006	0.739	5.363	1.00	0.00
ATOM 479	HA	ILE	A	36	146.950	1.932	3.710	1.00	0.00
ATOM 480	HB	ILE	A	36	144.813	3.371	5.284	1.00	0.00
ATOM 481	1HG1	ILE	A	36	144.657	2.077	2.552	1.00	0.00
ATOM 482	2HG1	ILE	A	36	143.832	1.522	4.005	1.00	0.00
ATOM 483	1HG2	ILE	A	36	144.985	5.093	3.655	1.00	0.00
ATOM 484	2HG2	ILE	A	36	146.045	4.115	2.640	1.00	0.00
ATOM 485	3HG2	ILE	A	36	146.625	4.726	4.190	1.00	0.00
ATOM 486	1HD1	ILE	A	36	143.302	4.309	3.253	1.00	0.00
ATOM 487	2HD1	ILE	A	36	142.203	3.047	3.812	1.00	0.00
ATOM 488	3HD1	ILE	A	36	142.713	3.089	2.125	1.00	0.00
ATOM 489	N	ARG	A	37	148.482	3.342	5.078	1.00	0.00
ATOM 490	CA	ARG	A	37	149.482	4.013	5.901	1.00	0.00
ATOM 491	C	ARG	A	37	149.654	5.467	5.474	1.00	0.00
ATOM 492	O	ARG	A	37	149.380	6.387	6.245	1.00	0.00
ATOM 493	CB	ARG	A	37	150.821	3.279	5.811	1.00	0.00
ATOM 494	CG	ARG	A	37	150.720	1.790	6.099	1.00	0.00
ATOM 495	CD	ARG	A	37	150.093	1.526	7.458	1.00	0.00

ATOM 496	NE	ARG A	37	150.689	2.353	8.506	1.00	0.00
ATOM 497	CZ	ARG A	37	150.129	2.558	9.696	1.00	0.00
ATOM 498	NH1	ARG A	37	148.963	1.999	9.993	1.00	0.00
ATOM 499	NH2	ARG A	37	150.737	3.323	10.591	1.00	0.00
ATOM 500	H	ARG A	37	148.617	3.291	4.109	1.00	0.00
ATOM 501	HA	ARG A	37	149.138	3.991	6.924	1.00	0.00
ATOM 502	1HB	ARG A	37	151.221	3.405	4.816	1.00	0.00
ATOM 503	2HB	ARG A	37	151.507	3.716	6.522	1.00	0.00
ATOM 504	1HG	ARG A	37	150.112	1.327	5.337	1.00	0.00
ATOM 505	2HG	ARG A	37	151.712	1.362	6.079	1.00	0.00
ATOM 506	1HD	ARG A	37	149.036	1.741	7.401	1.00	0.00
ATOM 507	2HD	ARG A	37	150.235	0.486	7.710	1.00	0.00
ATOM 508	HE	ARG A	37	151.550	2.778	8.311	1.00	0.00
ATOM 509	1HH1	ARG A	37	148.498	1.422	9.322	1.00	0.00
ATOM 510	2HH1	ARG A	37	148.547	2.158	10.889	1.00	0.00
ATOM 511	1HH2	ARG A	37	151.617	3.746	10.372	1.00	0.00
ATOM 512	2HH2	ARG A	37	150.318	3.477	11.485	1.00	0.00
ATOM 513	N	TRP A	38	150.112	5.667	4.242	1.00	0.00
ATOM 514	CA	TRP A	38	150.321	7.011	3.714	1.00	0.00
ATOM 515	C	TRP A	38	149.551	7.213	2.412	1.00	0.00
ATOM 516	O	TRP A	38	149.601	6.374	1.511	1.00	0.00
ATOM 517	CB	TRP A	38	151.814	7.269	3.486	1.00	0.00
ATOM 518	CG	TRP A	38	152.095	8.525	2.714	1.00	0.00
ATOM 519	CD1	TRP A	38	152.313	9.772	3.226	1.00	0.00
ATOM 520	CD2	TRP A	38	152.181	8.655	1.290	1.00	0.00
ATOM 521	NE1	TRP A	38	152.531	10.669	2.207	1.00	0.00
ATOM 522	CE2	TRP A	38	152.455	10.006	1.009	1.00	0.00
ATOM 523	CE3	TRP A	38	152.055	7.758	0.225	1.00	0.00
ATOM 524	CZ2	TRP A	38	152.603	10.481	-0.292	1.00	0.00

ATOM 525	CZ3	TRP A	38	152.202	8.230	-1.066	1.00	0.00
ATOM 526	CH2	TRP A	38	152.474	9.581	-1.315	1.00	0.00
ATOM 527	H	TRP A	38	150.313	4.895	3.674	1.00	0.00
ATOM 528	HA	TRP A	38	149.952	7.715	4.446	1.00	0.00
ATOM 529	1HB	TRP A	38	152.309	7.350	4.443	1.00	0.00
ATOM 530	2HB	TRP A	38	152.236	6.439	2.938	1.00	0.00
ATOM 531	HD1	TRP A	38	152.312	10.006	4.280	1.00	0.00
ATOM 532	HE1	TRP A	38	152.711	11.625	2.319	1.00	0.00
ATOM 533	HE3	TRP A	38	151.845	6.713	0.397	1.00	0.00
ATOM 534	HZ2	TRP A	38	152.809	11.521	-0.501	1.00	0.00
ATOM 535	HZ3	TRP A	38	152.108	7.552	-1.900	1.00	0.00
ATOM 536	HH2	TRP A	38	152.582	9.906	-2.340	1.00	0.00
ATOM 537	N	ILE A	39	148.850	8.337	2.318	1.00	0.00
ATOM 538	CA	ILE A	39	148.078	8.664	1.126	1.00	0.00
ATOM 539	C	ILE A	39	148.492	10.024	0.575	1.00	0.00
ATOM 540	O	ILE A	39	148.159	11.062	1.146	1.00	0.00
ATOM 541	CB	ILE A	39	146.566	8.679	1.420	1.00	0.00
ATOM 542	CG1	ILE A	39	146.151	7.396	2.143	1.00	0.00
ATOM 543	CG2	ILE A	39	145.777	8.844	0.129	1.00	0.00
ATOM 544	CD1	ILE A	39	144.691	7.371	2.539	1.00	0.00
ATOM 545	H	ILE A	39	148.859	8.968	3.067	1.00	0.00
ATOM 546	HA	ILE A	39	148.275	7.907	0.380	1.00	0.00
ATOM 547	HB	ILE A	39	146.353	9.526	2.053	1.00	0.00
ATOM 548	1HG1	ILE A	39	146.334	6.551	1.496	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.742	7.290	3.041	1.00	0.00
ATOM 550	1HG2	ILE A	39	144.765	8.499	0.279	1.00	0.00
ATOM 551	2HG2	ILE A	39	146.242	8.264	-0.654	1.00	0.00
ATOM 552	3HG2	ILE A	39	145.764	9.886	-0.154	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.182	8.211	2.090	1.00	0.00

ATOM 554	2HD1	ILE A	39	144.608	7.431	3.614	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.241	6.451	2.194	1.00	0.00
ATOM 556	N	GLY A	40	149.226	10.012	-0.532	1.00	0.00
ATOM 557	CA	GLY A	40	149.678	11.253	-1.131	1.00	0.00
ATOM 558	C	GLY A	40	150.185	11.072	-2.546	1.00	0.00
ATOM 559	O	GLY A	40	150.020	10.007	-3.142	1.00	0.00
ATOM 560	H	GLY A	40	149.467	9.155	-0.943	1.00	0.00
ATOM 561	1HA	GLY A	40	148.858	11.955	-1.141	1.00	0.00
ATOM 562	2HA	GLY A	40	150.474	11.659	-0.526	1.00	0.00
ATOM 563	N	GLN A	41	150.799	12.118	-3.087	1.00	0.00
ATOM 564	CA	GLN A	41	151.332	12.082	-4.441	1.00	0.00
ATOM 565	C	GLN A	41	152.794	12.528	-4.460	1.00	0.00
ATOM 566	O	GLN A	41	153.100	13.680	-4.154	1.00	0.00
ATOM 567	CB	GLN A	41	150.498	12.981	-5.353	1.00	0.00
ATOM 568	CG	GLN A	41	149.001	12.756	-5.223	1.00	0.00
ATOM 569	CD	GLN A	41	148.213	14.050	-5.269	1.00	0.00
ATOM 570	OE1	GLN A	41	148.200	14.818	-4.307	1.00	0.00
ATOM 571	NE2	GLN A	41	147.549	14.296	-6.391	1.00	0.00
ATOM 572	H	GLN A	41	150.896	12.939	-2.561	1.00	0.00
ATOM 573	HA	GLN A	41	151.268	11.065	-4.798	1.00	0.00
ATOM 574	1HB	GLN A	41	150.707	14.011	-5.111	1.00	0.00
ATOM 575	2HB	GLN A	41	150.782	12.797	-6.377	1.00	0.00
ATOM 576	1HG	GLN A	41	148.673	12.124	-6.034	1.00	0.00
ATOM 577	2HG	GLN A	41	148.803	12.265	-4.282	1.00	0.00
ATOM 578	1HE2	GLN A	41	147.606	13.638	-7.115	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.032	15.126	-6.451	1.00	0.00
ATOM 580	N	PRO A	42	153.720	11.620	-4.817	1.00	0.00
ATOM 581	CA	PRO A	42	155.153	11.933	-4.868	1.00	0.00
ATOM 582	C	PRO A	42	155.457	13.100	-5.803	1.00	0.00

ATOM 583	O	PRO A	42	154.658	13.428	-6.681	1.00	0.00
ATOM 584	CB	PRO A	42	155.789	10.645	-5.399	1.00	0.00
ATOM 585	CG	PRO A	42	154.802	9.575	-5.083	1.00	0.00
ATOM 586	CD	PRO A	42	153.453	10.221	-5.197	1.00	0.00
ATOM 587	HA	PRO A	42	155.544	12.152	-3.885	1.00	0.00
ATOM 588	1HB	PRO A	42	155.950	10.733	-6.465	1.00	0.00
ATOM 589	2HB	PRO A	42	156.731	10.472	-4.900	1.00	0.00
ATOM 590	1HG	PRO A	42	154.894	8.767	-5.794	1.00	0.00
ATOM 591	2HG	PRO A	42	154.961	9.213	-4.078	1.00	0.00
ATOM 592	1HD	PRO A	42	153.088	10.159	-6.213	1.00	0.00
ATOM 593	2HD	PRO A	42	152.754	9.763	-4.513	1.00	0.00
ATOM 594	N	PRO A	43	156.621	13.746	-5.625	1.00	0.00
ATOM 595	CA	PRO A	43	157.028	14.881	-6.457	1.00	0.00
ATOM 596	C	PRO A	43	157.418	14.454	-7.866	1.00	0.00
ATOM 597	O	PRO A	43	158.590	14.200	-8.146	1.00	0.00
ATOM 598	CB	PRO A	43	158.241	15.445	-5.719	1.00	0.00
ATOM 599	CG	PRO A	43	158.803	14.285	-4.973	1.00	0.00
ATOM 600	CD	PRO A	43	157.630	13.420	-4.600	1.00	0.00
ATOM 601	HA	PRO A	43	156.254	15.632	-6.510	1.00	0.00
ATOM 602	1HB	PRO A	43	158.948	15.836	-6.435	1.00	0.00
ATOM 603	2HB	PRO A	43	157.926	16.230	-5.048	1.00	0.00
ATOM 604	1HG	PRO A	43	159.487	13.738	-5.607	1.00	0.00
ATOM 605	2HG	PRO A	43	159.311	14.631	-4.085	1.00	0.00
ATOM 606	1HD	PRO A	43	157.903	12.376	-4.647	1.00	0.00
ATOM 607	2HD	PRO A	43	157.273	13.673	-3.614	1.00	0.00
ATOM 608	N	GLY A	44	156.432	14.379	-8.752	1.00	0.00
ATOM 609	CA	GLY A	44	156.696	13.984	-10.122	1.00	0.00
ATOM 610	C	GLY A	44	155.463	13.450	-10.820	1.00	0.00
ATOM 611	O	GLY A	44	155.131	13.883	-11.924	1.00	0.00

ATOM 612	H	GLY A	44	155.517	14.595	-8.473	1.00	0.00
ATOM 613	1HA	GLY A	44	157.062	14.839	-10.667	1.00	0.00
ATOM 614	2HA	GLY A	44	157.457	13.216	-10.121	1.00	0.00
ATOM 615	N	LEU A	45	154.782	12.507	-10.178	1.00	0.00
ATOM 616	CA	LEU A	45	153.577	11.916	-10.749	1.00	0.00
ATOM 617	C	LEU A	45	152.383	12.121	-9.826	1.00	0.00
ATOM 618	O	LEU A	45	152.330	11.557	-8.733	1.00	0.00
ATOM 619	CB	LEU A	45	153.789	10.422	-11.006	1.00	0.00
ATOM 620	CG	LEU A	45	154.407	9.647	-9.841	1.00	0.00
ATOM 621	CD1	LEU A	45	154.115	8.159	-9.974	1.00	0.00
ATOM 622	CD2	LEU A	45	155.907	9.898	-9.771	1.00	0.00
ATOM 623	H	LEU A	45	155.095	12.205	-9.298	1.00	0.00
ATOM 624	HA	LEU A	45	153.380	12.409	-11.690	1.00	0.00
ATOM 625	1HB	LEU A	45	152.830	9.980	-11.238	1.00	0.00
ATOM 626	2HB	LEU A	45	154.434	10.314	-11.865	1.00	0.00
ATOM 627	HG	LEU A	45	153.966	9.991	-8.916	1.00	0.00
ATOM 628	1HD1	LEU A	45	155.036	7.624	-10.154	1.00	0.00
ATOM 629	2HD1	LEU A	45	153.438	7.995	-10.800	1.00	0.00
ATOM 630	3HD1	LEU A	45	153.663	7.798	-9.062	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.426	8.959	-9.648	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.125	10.542	-8.932	1.00	0.00
ATOM 633	3HD2	LEU A	45	156.236	10.374	-10.684	1.00	0.00
ATOM 634	N	ASN A	46	151.424	12.927	-10.269	1.00	0.00
ATOM 635	CA	ASN A	46	150.235	13.193	-9.470	1.00	0.00
ATOM 636	C	ASN A	46	149.317	11.976	-9.459	1.00	0.00
ATOM 637	O	ASN A	46	148.674	11.660	-10.460	1.00	0.00
ATOM 638	CB	ASN A	46	149.488	14.408	-10.023	1.00	0.00
ATOM 639	CG	ASN A	46	148.414	14.909	-9.078	1.00	0.00
ATOM 640	OD1	ASN A	46	147.337	14.320	-8.976	1.00	0.00



ATOM 641	ND2	ASN	A	46	148.701	16.002	-8.381	1.00	0.00
ATOM 642	H	ASN	A	46	151.517	13.350	-11.148	1.00	0.00
ATOM 643	HA	ASN	A	46	150.552	13.403	-8.459	1.00	0.00
ATOM 644	1HB	ASN	A	46	150.192	15.210	-10.193	1.00	0.00
ATOM 645	2HB	ASN	A	46	149.022	14.140	-10.960	1.00	0.00
ATOM 646	1HD2	ASN	A	46	149.578	16.418	-8.513	1.00	0.00
ATOM 647	2HD2	ASN	A	46	148.024	16.347	-7.762	1.00	0.00
ATOM 648	N	GLU	A	47	149.262	11.298	-8.318	1.00	0.00
ATOM 649	CA	GLU	A	47	148.424	10.115	-8.169	1.00	0.00
ATOM 650	C	GLU	A	47	148.293	9.726	-6.701	1.00	0.00
ATOM 651	O	GLU	A	47	149.290	9.450	-6.033	1.00	0.00
ATOM 652	CB	GLU	A	47	149.005	8.945	-8.967	1.00	0.00
ATOM 653	CG	GLU	A	47	150.523	8.861	-8.914	1.00	0.00
ATOM 654	CD	GLU	A	47	151.092	7.924	-9.962	1.00	0.00
ATOM 655	OE1	GLU	A	47	151.464	6.787	-9.603	1.00	0.00
ATOM 656	OE2	GLU	A	47	151.164	8.328	-11.142	1.00	0.00
ATOM 657	H	GLU	A	47	149.799	11.601	-7.558	1.00	0.00
ATOM 658	HA	GLU	A	47	147.445	10.351	-8.555	1.00	0.00
ATOM 659	1HB	GLU	A	47	148.602	8.022	-8.577	1.00	0.00
ATOM 660	2HB	GLU	A	47	148.709	9.048	-10.001	1.00	0.00
ATOM 661	1HG	GLU	A	47	150.931	9.847	-9.076	1.00	0.00
ATOM 662	2HG	GLU	A	47	150.820	8.507	-7.938	1.00	0.00
ATOM 663	N	VAL	A	48	147.064	9.696	-6.203	1.00	0.00
ATOM 664	CA	VAL	A	48	146.817	9.330	-4.815	1.00	0.00
ATOM 665	C	VAL	A	48	147.192	7.874	-4.570	1.00	0.00
ATOM 666	O	VAL	A	48	146.430	6.963	-4.895	1.00	0.00
ATOM 667	CB	VAL	A	48	145.342	9.544	-4.426	1.00	0.00
ATOM 668	CG1	VAL	A	48	145.152	9.357	-2.928	1.00	0.00
ATOM 669	CG2	VAL	A	48	144.869	10.922	-4.863	1.00	0.00

ATOM 670	H	VAL A	48	146.305	9.918	-6.782	1.00	0.00
ATOM 671	HA	VAL A	48	147.433	9.961	-4.188	1.00	0.00
ATOM 672	HB	VAL A	48	144.745	8.803	-4.936	1.00	0.00
ATOM 673	1HG1	VAL A	48	144.216	9.803	-2.627	1.00	0.00
ATOM 674	2HG1	VAL A	48	145.964	9.833	-2.401	1.00	0.00
ATOM 675	3HG1	VAL A	48	145.140	8.302	-2.696	1.00	0.00
ATOM 676	1HG2	VAL A	48	145.632	11.653	-4.636	1.00	0.00
ATOM 677	2HG2	VAL A	48	143.961	11.174	-4.337	1.00	0.00
ATOM 678	3HG2	VAL A	48	144.681	10.918	-5.926	1.00	0.00
ATOM 679	N	LEU A	49	148.373	7.660	-4.000	1.00	0.00
ATOM 680	CA	LEU A	49	148.852	6.313	-3.717	1.00	0.00
ATOM 681	C	LEU A	49	148.792	6.021	-2.223	1.00	0.00
ATOM 682	O	LEU A	49	149.500	6.641	-1.431	1.00	0.00
ATOM 683	CB	LEU A	49	150.283	6.140	-4.227	1.00	0.00
ATOM 684	CG	LEU A	49	150.454	6.288	-5.740	1.00	0.00
ATOM 685	CD1	LEU A	49	151.838	6.822	-6.071	1.00	0.00
ATOM 686	CD2	LEU A	49	150.214	4.956	-6.434	1.00	0.00
ATOM 687	H	LEU A	49	148.937	8.425	-3.765	1.00	0.00
ATOM 688	HA	LEU A	49	148.208	5.617	-4.234	1.00	0.00
ATOM 689	1HB	LEU A	49	150.907	6.878	-3.741	1.00	0.00
ATOM 690	2HB	LEU A	49	150.629	5.158	-3.942	1.00	0.00
ATOM 691	HG	LEU A	49	149.726	6.995	-6.111	1.00	0.00
ATOM 692	1HD1	LEU A	49	151.800	7.900	-6.146	1.00	0.00
ATOM 693	2HD1	LEU A	49	152.169	6.408	-7.012	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.530	6.540	-5.290	1.00	0.00
ATOM 695	1HD2	LEU A	49	149.181	4.891	-6.742	1.00	0.00
ATOM 696	2HD2	LEU A	49	150.438	4.149	-5.751	1.00	0.00
ATOM 697	3HD2	LEU A	49	150.854	4.882	-7.301	1.00	0.00
ATOM 698	N	ALA A	50	147.943	5.072	-1.846	1.00	0.00

ATOM 699	CA	ALA A	50	147.794	4.702	-0.446	1.00	0.00
ATOM 700	C	ALA A	50	148.728	3.553	-0.081	1.00	0.00
ATOM 701	O	ALA A	50	148.587	2.440	-0.588	1.00	0.00
ATOM 702	CB	ALA A	50	146.350	4.325	-0.152	1.00	0.00
ATOM 703	H	ALA A	50	147.405	4.613	-2.524	1.00	0.00
ATOM 704	HA	ALA A	50	148.047	5.565	0.151	1.00	0.00
ATOM 705	1HB	ALA A	50	145.908	3.878	-1.029	1.00	0.00
ATOM 706	2HB	ALA A	50	145.795	5.211	0.119	1.00	0.00
ATOM 707	3HB	ALA A	50	146.321	3.620	0.666	1.00	0.00
ATOM 708	N	GLY A	51	149.682	3.830	0.801	1.00	0.00
ATOM 709	CA	GLY A	51	150.625	2.809	1.219	1.00	0.00
ATOM 710	C	GLY A	51	149.976	1.735	2.070	1.00	0.00
ATOM 711	O	GLY A	51	149.657	1.965	3.236	1.00	0.00
ATOM 712	H	GLY A	51	149.746	4.734	1.173	1.00	0.00
ATOM 713	1HA	GLY A	51	151.052	2.348	0.341	1.00	0.00
ATOM 714	2HA	GLY A	51	151.414	3.275	1.789	1.00	0.00
ATOM 715	N	LEU A	52	149.779	0.557	1.485	1.00	0.00
ATOM 716	CA	LEU A	52	149.164	-0.556	2.198	1.00	0.00
ATOM 717	C	LEU A	52	150.224	-1.465	2.808	1.00	0.00
ATOM 718	O	LEU A	52	151.150	-1.902	2.125	1.00	0.00
ATOM 719	CB	LEU A	52	148.265	-1.358	1.256	1.00	0.00
ATOM 720	CG	LEU A	52	147.001	-0.634	0.792	1.00	0.00
ATOM 721	CD1	LEU A	52	146.360	-1.372	-0.373	1.00	0.00
ATOM 722	CD2	LEU A	52	146.016	-0.493	1.943	1.00	0.00
ATOM 723	H	LEU A	52	150.054	0.434	0.553	1.00	0.00
ATOM 724	HA	LEU A	52	148.559	-0.145	2.994	1.00	0.00
ATOM 725	1HB	LEU A	52	148.844	-1.626	0.383	1.00	0.00
ATOM 726	2HB	LEU A	52	147.968	-2.266	1.761	1.00	0.00
ATOM 727	HG	LEU A	52	147.265	0.358	0.453	1.00	0.00

ATOM 728	1HD1	LEU A	52	146.068	-2.362	-0.055	1.00	0.00
ATOM 729	2HD1	LEU A	52	147.069	-1.448	-1.184	1.00	0.00
ATOM 730	3HD1	LEU A	52	145.488	-0.829	-0.707	1.00	0.00
ATOM 731	1HD2	LEU A	52	145.198	0.145	1.641	1.00	0.00
ATOM 732	2HD2	LEU A	52	146.517	-0.057	2.794	1.00	0.00
ATOM 733	3HD2	LEU A	52	145.633	-1.467	2.211	1.00	0.00
ATOM 734	N	GLU A	53	150.082	-1.748	4.100	1.00	0.00
ATOM 735	CA	GLU A	53	151.027	-2.607	4.802	1.00	0.00
ATOM 736	C	GLU A	53	150.520	-4.044	4.856	1.00	0.00
ATOM 737	O	GLU A	53	149.535	-4.340	5.532	1.00	0.00
ATOM 738	CB	GLU A	53	151.266	-2.085	6.221	1.00	0.00
ATOM 739	CG	GLU A	53	152.268	-2.908	7.013	1.00	0.00
ATOM 740	CD	GLU A	53	151.835	-3.131	8.448	1.00	0.00
ATOM 741	OE1	GLU A	53	151.291	-4.216	8.744	1.00	0.00
ATOM 742	OE2	GLU A	53	152.041	-2.220	9.279	1.00	0.00
ATOM 743	H	GLU A	53	149.323	-1.370	4.591	1.00	0.00
ATOM 744	HA	GLU A	53	151.961	-2.587	4.259	1.00	0.00
ATOM 745	1HB	GLU A	53	151.633	-1.071	6.162	1.00	0.00
ATOM 746	2HB	GLU A	53	150.327	-2.087	6.756	1.00	0.00
ATOM 747	1HG	GLU A	53	152.382	-3.870	6.534	1.00	0.00
ATOM 748	2HG	GLU A	53	153.217	-2.393	7.013	1.00	0.00
ATOM 749	N	LEU A	54	151.200	-4.933	4.139	1.00	0.00
ATOM 750	CA	LEU A	54	150.817	-6.340	4.105	1.00	0.00
ATOM 751	C	LEU A	54	151.111	-7.016	5.440	1.00	0.00
ATOM 752	O	LEU A	54	152.156	-6.782	6.049	1.00	0.00
ATOM 753	CB	LEU A	54	151.558	-7.064	2.979	1.00	0.00
ATOM 754	CG	LEU A	54	151.517	-6.362	1.621	1.00	0.00
ATOM 755	CD1	LEU A	54	152.750	-6.710	0.802	1.00	0.00
ATOM 756	CD2	LEU A	54	150.250	-6.737	0.867	1.00	0.00

ATOM 757	H	LEU A	54	151.976	-4.637	3.621	1.00	0.00
ATOM 758	HA	LEU A	54	149.755	-6.390	3.916	1.00	0.00
ATOM 759	1HB	LEU A	54	152.592	-7.178	3.272	1.00	0.00
ATOM 760	2HB	LEU A	54	151.123	-8.046	2.864	1.00	0.00
ATOM 761	HG	LEU A	54	151.510	-5.293	1.776	1.00	0.00
ATOM 762	1HD1	LEU A	54	152.593	-6.419	-0.226	1.00	0.00
ATOM 763	2HD1	LEU A	54	152.926	-7.775	0.853	1.00	0.00
ATOM 764	3HD1	LEU A	54	153.605	-6.184	1.199	1.00	0.00
ATOM 765	1HD2	LEU A	54	150.238	-7.803	0.691	1.00	0.00
ATOM 766	2HD2	LEU A	54	150.227	-6.216	-0.080	1.00	0.00
ATOM 767	3HD2	LEU A	54	149.386	-6.459	1.452	1.00	0.00
ATOM 768	N	GLU A	55	150.185	-7.857	5.890	1.00	0.00
ATOM 769	CA	GLU A	55	150.346	-8.568	7.153	1.00	0.00
ATOM 770	C	GLU A	55	151.400	-9.662	7.031	1.00	0.00
ATOM 771	O	GLU A	55	152.098	-9.977	7.995	1.00	0.00
ATOM 772	CB	GLU A	55	149.013	-9.174	7.594	1.00	0.00
ATOM 773	CG	GLU A	55	148.076	-8.172	8.249	1.00	0.00
ATOM 774	CD	GLU A	55	146.632	-8.363	7.827	1.00	0.00
ATOM 775	OE1	GLU A	55	145.767	-8.503	8.717	1.00	0.00
ATOM 776	OE2	GLU A	55	146.366	-8.371	6.606	1.00	0.00
ATOM 777	H	GLU A	55	149.374	-8.002	5.359	1.00	0.00
ATOM 778	HA	GLU A	55	150.670	-7.853	7.895	1.00	0.00
ATOM 779	1HB	GLU A	55	148.515	-9.588	6.730	1.00	0.00
ATOM 780	2HB	GLU A	55	149.207	-9.967	8.301	1.00	0.00
ATOM 781	1HG	GLU A	55	148.139	-8.286	9.321	1.00	0.00
ATOM 782	2HG	GLU A	55	148.387	-7.174	7.974	1.00	0.00
ATOM 783	N	ASP A	56	151.511	-10.239	5.839	1.00	0.00
ATOM 784	CA	ASP A	56	152.481	-11.300	5.590	1.00	0.00
ATOM 785	C	ASP A	56	153.770	-10.732	5.004	1.00	0.00

ATOM 786	O	ASP A	56	153.744	-10.008	4.008	1.00	0.00
ATOM 787	CB	ASP A	56	151.893	-12.345	4.642	1.00	0.00
ATOM 788	CG	ASP A	56	151.185	-13.464	5.381	1.00	0.00
ATOM 789	OD1	ASP A	56	151.383	-14.640	5.009	1.00	0.00
ATOM 790	OD2	ASP A	56	150.434	-13.164	6.333	1.00	0.00
ATOM 791	H	ASP A	56	150.927	-9.945	5.109	1.00	0.00
ATOM 792	HA	ASP A	56	152.707	-11.770	6.535	1.00	0.00
ATOM 793	1HB	ASP A	56	151.181	-11.867	3.985	1.00	0.00
ATOM 794	2HB	ASP A	56	152.688	-12.775	4.051	1.00	0.00
ATOM 795	N	GLU A	57	154.895	-11.065	5.626	1.00	0.00
ATOM 796	CA	GLU A	57	156.194	-10.588	5.166	1.00	0.00
ATOM 797	C	GLU A	57	156.577	-11.245	3.845	1.00	0.00
ATOM 798	O	GLU A	57	157.029	-12.390	3.817	1.00	0.00
ATOM 799	CB	GLU A	57	157.267	-10.870	6.220	1.00	0.00
ATOM 800	CG	GLU A	57	157.447	-9.740	7.221	1.00	0.00
ATOM 801	CD	GLU A	57	158.872	-9.634	7.728	1.00	0.00
ATOM 802	OE1	GLU A	57	159.805	-9.697	6.900	1.00	0.00
ATOM 803	OE2	GLU A	57	159.056	-9.488	8.955	1.00	0.00
ATOM 804	H	GLU A	57	154.851	-11.645	6.416	1.00	0.00
ATOM 805	HA	GLU A	57	156.121	-9.522	5.016	1.00	0.00
ATOM 806	1HB	GLU A	57	156.996	-11.764	6.763	1.00	0.00
ATOM 807	2HB	GLU A	57	158.211	-11.035	5.721	1.00	0.00
ATOM 808	1HG	GLU A	57	157.181	-8.809	6.746	1.00	0.00
ATOM 809	2HG	GLU A	57	156.793	-9.914	8.062	1.00	0.00
ATOM 810	N	CYS A	58	156.395	-10.513	2.750	1.00	0.00
ATOM 811	CA	CYS A	58	156.722	-11.025	1.425	1.00	0.00
ATOM 812	C	CYS A	58	158.004	-10.389	0.898	1.00	0.00
ATOM 813	O	CYS A	58	158.094	-9.169	0.762	1.00	0.00
ATOM 814	CB	CYS A	58	155.570	-10.760	0.454	1.00	0.00

ATOM 815	SG	CYS A	58	154.347	-12.089	0.379	1.00	0.00
ATOM 816	H	CYS A	58	156.032	-9.607	2.837	1.00	0.00
ATOM 817	HA	CYS A	58	156.872	-12.091	1.509	1.00	0.00
ATOM 818	1HB	CYS A	58	155.057	-9.858	0.754	1.00	0.00
ATOM 819	2HB	CYS A	58	155.972	-10.625	-0.540	1.00	0.00
ATOM 820	HG	CYS A	58	154.819	-12.920	0.284	1.00	0.00
ATOM 821	N	ALA A	59	158.995	-11.225	0.602	1.00	0.00
ATOM 822	CA	ALA A	59	160.272	-10.744	0.090	1.00	0.00
ATOM 823	C	ALA A	59	160.092	-10.017	-1.238	1.00	0.00
ATOM 824	O	ALA A	59	159.556	-10.575	-2.195	1.00	0.00
ATOM 825	CB	ALA A	59	161.246	-11.902	-0.069	1.00	0.00
ATOM 826	H	ALA A	59	158.864	-12.187	0.732	1.00	0.00
ATOM 827	HA	ALA A	59	160.683	-10.055	0.813	1.00	0.00
ATOM 828	1HB	ALA A	59	161.919	-11.697	-0.889	1.00	0.00
ATOM 829	2HB	ALA A	59	160.697	-12.809	-0.272	1.00	0.00
ATOM 830	3HB	ALA A	59	161.814	-12.021	0.841	1.00	0.00
ATOM 831	N	GLY A	60	160.541	-8.767	-1.288	1.00	0.00
ATOM 832	CA	GLY A	60	160.420	-7.984	-2.504	1.00	0.00
ATOM 833	C	GLY A	60	159.945	-6.569	-2.237	1.00	0.00
ATOM 834	O	GLY A	60	160.265	-5.647	-2.989	1.00	0.00
ATOM 835	H	GLY A	60	160.959	-8.373	-0.494	1.00	0.00
ATOM 836	1HA	GLY A	60	161.382	-7.943	-2.991	1.00	0.00
ATOM 837	2HA	GLY A	60	159.715	-8.469	-3.163	1.00	0.00
ATOM 838	N	CYS A	61	159.183	-6.395	-1.163	1.00	0.00
ATOM 839	CA	CYS A	61	158.664	-5.082	-0.798	1.00	0.00
ATOM 840	C	CYS A	61	159.626	-4.359	0.140	1.00	0.00
ATOM 841	O	CYS A	61	160.633	-4.922	0.567	1.00	0.00
ATOM 842	CB	CYS A	61	157.293	-5.218	-0.136	1.00	0.00
ATOM 843	SG	CYS A	61	156.080	-6.119	-1.129	1.00	0.00

ATOM 844	H	CYS A	61	158.963	-7.168	-0.602	1.00	0.00
ATOM 845	HA	CYS A	61	158.561	-4.503	-1.704	1.00	0.00
ATOM 846	1HB	CYS A	61	157.403	-5.742	0.801	1.00	0.00
ATOM 847	2HB	CYS A	61	156.894	-4.232	0.055	1.00	0.00
ATOM 848	HG	CYS A	61	156.127	-5.787	-2.029	1.00	0.00
ATOM 849	N	THR A	62	159.306	-3.107	0.457	1.00	0.00
ATOM 850	CA	THR A	62	160.142	-2.308	1.345	1.00	0.00
ATOM 851	C	THR A	62	159.530	-2.225	2.739	1.00	0.00
ATOM 852	O	THR A	62	158.568	-2.929	3.048	1.00	0.00
ATOM 853	CB	THR A	62	160.329	-0.902	0.774	1.00	0.00
ATOM 854	OG1	THR A	62	159.146	-0.138	0.925	1.00	0.00
ATOM 855	CG2	THR A	62	160.696	-0.896	-0.695	1.00	0.00
ATOM 856	H	THR A	62	158.490	-2.714	0.084	1.00	0.00
ATOM 857	HA	THR A	62	161.106	-2.789	1.416	1.00	0.00
ATOM 858	HB	THR A	62	161.123	-0.407	1.314	1.00	0.00
ATOM 859	HG1	THR A	62	158.400	-0.629	0.572	1.00	0.00
ATOM 860	1HG2	THR A	62	161.182	0.036	-0.941	1.00	0.00
ATOM 861	2HG2	THR A	62	159.800	-1.003	-1.290	1.00	0.00
ATOM 862	3HG2	THR A	62	161.365	-1.718	-0.902	1.00	0.00
ATOM 863	N	ASP A	63	160.095	-1.362	3.578	1.00	0.00
ATOM 864	CA	ASP A	63	159.605	-1.188	4.940	1.00	0.00
ATOM 865	C	ASP A	63	158.822	0.115	5.073	1.00	0.00
ATOM 866	O	ASP A	63	158.815	0.740	6.134	1.00	0.00
ATOM 867	CB	ASP A	63	160.772	-1.199	5.930	1.00	0.00
ATOM 868	CG	ASP A	63	161.778	-0.100	5.649	1.00	0.00
ATOM 869	OD1	ASP A	63	162.909	-0.422	5.230	1.00	0.00
ATOM 870	OD2	ASP A	63	161.434	1.085	5.850	1.00	0.00
ATOM 871	H	ASP A	63	160.860	-0.830	3.272	1.00	0.00
ATOM 872	HA	ASP A	63	158.947	-2.013	5.164	1.00	0.00



ATOM 873	1HB	ASP A	63	160.389	-1.064	6.930	1.00	0.00
ATOM 874	2HB	ASP A	63	161.279	-2.151	5.867	1.00	0.00
ATOM 875	N	GLY A	64	158.166	0.519	3.991	1.00	0.00
ATOM 876	CA	GLY A	64	157.389	1.744	4.009	1.00	0.00
ATOM 877	C	GLY A	64	158.114	2.900	3.347	1.00	0.00
ATOM 878	O	GLY A	64	158.167	4.002	3.892	1.00	0.00
ATOM 879	H	GLY A	64	158.208	-0.020	3.174	1.00	0.00
ATOM 880	1HA	GLY A	64	156.457	1.574	3.492	1.00	0.00
ATOM 881	2HA	GLY A	64	157.177	2.008	5.035	1.00	0.00
ATOM 882	N	THR A	65	158.674	2.647	2.168	1.00	0.00
ATOM 883	CA	THR A	65	159.399	3.675	1.431	1.00	0.00
ATOM 884	C	THR A	65	159.023	3.652	-0.047	1.00	0.00
ATOM 885	O	THR A	65	159.172	2.632	-0.720	1.00	0.00
ATOM 886	CB	THR A	65	160.908	3.476	1.589	1.00	0.00
ATOM 887	OG1	THR A	65	161.327	2.287	0.941	1.00	0.00
ATOM 888	CG2	THR A	65	161.353	3.394	3.032	1.00	0.00
ATOM 889	H	THR A	65	158.598	1.748	1.786	1.00	0.00
ATOM 890	HA	THR A	65	159.127	4.635	1.845	1.00	0.00
ATOM 891	HB	THR A	65	161.420	4.310	1.131	1.00	0.00
ATOM 892	HG1	THR A	65	160.733	1.570	1.174	1.00	0.00
ATOM 893	1HG2	THR A	65	161.703	2.395	3.245	1.00	0.00
ATOM 894	2HG2	THR A	65	160.521	3.631	3.680	1.00	0.00
ATOM 895	3HG2	THR A	65	162.154	4.099	3.203	1.00	0.00
ATOM 896	N	PHE A	66	158.536	4.784	-0.546	1.00	0.00
ATOM 897	CA	PHE A	66	158.138	4.894	-1.945	1.00	0.00
ATOM 898	C	PHE A	66	159.106	5.785	-2.717	1.00	0.00
ATOM 899	O	PHE A	66	159.243	6.971	-2.422	1.00	0.00
ATOM 900	CB	PHE A	66	156.718	5.452	-2.051	1.00	0.00
ATOM 901	CG	PHE A	66	156.051	5.152	-3.362	1.00	0.00

ATOM 902	CD1	PHE A	66	155.567	6.177	-4.159	1.00	0.00
ATOM 903	CD2	PHE A	66	155.908	3.844	-3.798	1.00	0.00
ATOM 904	CE1	PHE A	66	154.953	5.903	-5.367	1.00	0.00
ATOM 905	CE2	PHE A	66	155.294	3.564	-5.004	1.00	0.00
ATOM 906	CZ	PHE A	66	154.816	4.596	-5.790	1.00	0.00
ATOM 907	H	PHE A	66	158.441	5.563	0.040	1.00	0.00
ATOM 908	HA	PHE A	66	158.159	3.904	-2.374	1.00	0.00
ATOM 909	1HB	PHE A	66	156.112	5.028	-1.265	1.00	0.00
ATOM 910	2HB	PHE A	66	156.752	6.526	-1.931	1.00	0.00
ATOM 911	HD1	PHE A	66	155.674	7.200	-3.829	1.00	0.00
ATOM 912	HD2	PHE A	66	156.282	3.037	-3.185	1.00	0.00
ATOM 913	HE1	PHE A	66	154.579	6.711	-5.978	1.00	0.00
ATOM 914	HE2	PHE A	66	155.189	2.541	-5.333	1.00	0.00
ATOM 915	HZ	PHE A	66	154.337	4.379	-6.732	1.00	0.00
ATOM 916	N	ARG A	67	159.776	5.204	-3.706	1.00	0.00
ATOM 917	CA	ARG A	67	160.732	5.945	-4.521	1.00	0.00
ATOM 918	C	ARG A	67	161.860	6.505	-3.662	1.00	0.00
ATOM 919	O	ARG A	67	162.359	7.602	-3.913	1.00	0.00
ATOM 920	CB	ARG A	67	160.026	7.082	-5.263	1.00	0.00
ATOM 921	CG	ARG A	67	158.955	6.606	-6.229	1.00	0.00
ATOM 922	CD	ARG A	67	158.909	7.468	-7.481	1.00	0.00
ATOM 923	NE	ARG A	67	160.062	7.236	-8.347	1.00	0.00
ATOM 924	CZ	ARG A	67	160.434	8.061	-9.323	1.00	0.00
ATOM 925	NH1	ARG A	67	159.746	9.171	-9.562	1.00	0.00
ATOM 926	NH2	ARG A	67	161.496	7.775	-10.064	1.00	0.00
ATOM 927	H	ARG A	67	159.624	4.254	-3.893	1.00	0.00
ATOM 928	HA	ARG A	67	161.150	5.261	-5.244	1.00	0.00
ATOM 929	1HB	ARG A	67	159.564	7.736	-4.539	1.00	0.00
ATOM 930	2HB	ARG A	67	160.762	7.642	-5.822	1.00	0.00

ATOM 931	1HG	ARG A	67	159.166	5.587	-6.514	1.00	0.00
ATOM 932	2HG	ARG A	67	157.994	6.651	-5.736	1.00	0.00
ATOM 933	1HD	ARG A	67	158.008	7.237	-8.029	1.00	0.00
ATOM 934	2HD	ARG A	67	158.894	8.507	-7.186	1.00	0.00
ATOM 935	HE	ARG A	67	160.588	6.424	-8.193	1.00	0.00
ATOM 936	1HH1	ARG A	67	158.944	9.393	-9.007	1.00	0.00
ATOM 937	2HH1	ARG A	67	160.030	9.786	-10.297	1.00	0.00
ATOM 938	1HH2	ARG A	67	162.018	6.940	-9.888	1.00	0.00
ATOM 939	2HH2	ARG A	67	161.775	8.395	-10.798	1.00	0.00
ATOM 940	N	GLY A	68	162.258	5.744	-2.648	1.00	0.00
ATOM 941	CA	GLY A	68	163.326	6.180	-1.767	1.00	0.00
ATOM 942	C	GLY A	68	162.888	7.290	-0.831	1.00	0.00
ATOM 943	O	GLY A	68	163.699	8.118	-0.417	1.00	0.00
ATOM 944	H	GLY A	68	161.824	4.879	-2.497	1.00	0.00
ATOM 945	1HA	GLY A	68	163.660	5.339	-1.179	1.00	0.00
ATOM 946	2HA	GLY A	68	164.150	6.537	-2.368	1.00	0.00
ATOM 947	N	THR A	69	161.602	7.306	-0.497	1.00	0.00
ATOM 948	CA	THR A	69	161.057	8.321	0.396	1.00	0.00
ATOM 949	C	THR A	69	160.168	7.689	1.461	1.00	0.00
ATOM 950	O	THR A	69	159.055	7.247	1.174	1.00	0.00
ATOM 951	CB	THR A	69	160.261	9.357	-0.401	1.00	0.00
ATOM 952	OG1	THR A	69	160.900	9.644	-1.631	1.00	0.00
ATOM 953	CG2	THR A	69	160.075	10.666	0.336	1.00	0.00
ATOM 954	H	THR A	69	161.005	6.618	-0.860	1.00	0.00
ATOM 955	HA	THR A	69	161.886	8.814	0.882	1.00	0.00
ATOM 956	HB	THR A	69	159.281	8.955	-0.614	1.00	0.00
ATOM 957	HG1	THR A	69	161.773	10.008	-1.461	1.00	0.00
ATOM 958	1HG2	THR A	69	160.256	11.488	-0.340	1.00	0.00
ATOM 959	2HG2	THR A	69	160.772	10.717	1.160	1.00	0.00

ATOM 960	3HG2	THR	A	69	159.065	10.725	0.714	1.00	0.00
ATOM 961	N	ARG	A	70	160.666	7.649	2.693	1.00	0.00
ATOM 962	CA	ARG	A	70	159.916	7.070	3.801	1.00	0.00
ATOM 963	C	ARG	A	70	158.751	7.971	4.200	1.00	0.00
ATOM 964	O	ARG	A	70	158.945	9.137	4.541	1.00	0.00
ATOM 965	CB	ARG	A	70	160.835	6.844	5.004	1.00	0.00
ATOM 966	CG	ARG	A	70	160.136	6.206	6.193	1.00	0.00
ATOM 967	CD	ARG	A	70	160.931	6.397	7.474	1.00	0.00
ATOM 968	NE	ARG	A	70	162.034	5.445	7.582	1.00	0.00
ATOM 969	CZ	ARG	A	70	163.054	5.585	8.426	1.00	0.00
ATOM 970	NH1	ARG	A	70	163.116	6.635	9.235	1.00	0.00
ATOM 971	NH2	ARG	A	70	164.015	4.673	8.459	1.00	0.00
ATOM 972	H	ARG	A	70	161.559	8.016	2.860	1.00	0.00
ATOM 973	HA	ARG	A	70	159.524	6.118	3.476	1.00	0.00
ATOM 974	1HB	ARG	A	70	161.649	6.200	4.704	1.00	0.00
ATOM 975	2HB	ARG	A	70	161.239	7.796	5.318	1.00	0.00
ATOM 976	1HG	ARG	A	70	159.164	6.660	6.312	1.00	0.00
ATOM 977	2HG	ARG	A	70	160.020	5.149	6.005	1.00	0.00
ATOM 978	1HD	ARG	A	70	161.331	7.400	7.489	1.00	0.00
ATOM 979	2HD	ARG	A	70	160.268	6.263	8.317	1.00	0.00
ATOM 980	HE	ARG	A	70	162.013	4.661	6.995	1.00	0.00
ATOM 981	1HH1	ARG	A	70	162.394	7.327	9.215	1.00	0.00
ATOM 982	2HH1	ARG	A	70	163.885	6.734	9.866	1.00	0.00
ATOM 983	1HH2	ARG	A	70	163.974	3.880	7.851	1.00	0.00
ATOM 984	2HH2	ARG	A	70	164.782	4.778	9.092	1.00	0.00
ATOM 985	N	TYR	A	71	157.543	7.421	4.154	1.00	0.00
ATOM 986	CA	TYR	A	71	156.346	8.176	4.510	1.00	0.00
ATOM 987	C	TYR	A	71	155.852	7.788	5.900	1.00	0.00
ATOM 988	O	TYR	A	71	155.446	8.644	6.686	1.00	0.00

ATOM 989	CB	TYR A	71	155.242	7.936	3.479	1.00	0.00
ATOM 990	CG	TYR A	71	155.536	8.538	2.124	1.00	0.00
ATOM 991	CD1	TYR A	71	156.048	9.825	2.011	1.00	0.00
ATOM 992	CD2	TYR A	71	155.304	7.820	0.958	1.00	0.00
ATOM 993	CE1	TYR A	71	156.318	10.379	0.773	1.00	0.00
ATOM 994	CE2	TYR A	71	155.572	8.367	-0.283	1.00	0.00
ATOM 995	CZ	TYR A	71	156.079	9.647	-0.369	1.00	0.00
ATOM 996	OH	TYR A	71	156.347	10.193	-1.603	1.00	0.00
ATOM 997	H	TYR A	71	157.452	6.487	3.874	1.00	0.00
ATOM 998	HA	TYR A	71	156.604	9.224	4.511	1.00	0.00
ATOM 999	1HB	TYR A	71	155.106	6.873	3.346	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.321	8.368	3.842	1.00	0.00
ATOM 1001	HD1	TYR A	71	156.234	10.397	2.908	1.00	0.00
ATOM 1002	HD2	TYR A	71	154.906	6.819	1.029	1.00	0.00
ATOM 1003	HE1	TYR A	71	156.716	11.381	0.706	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.384	7.793	-1.178	1.00	0.00
ATOM 1005	HH	TYR A	71	157.236	9.952	-1.874	1.00	0.00
ATOM 1006	N	PHE A	72	155.891	6.494	6.197	1.00	0.00
ATOM 1007	CA	PHE A	72	155.448	5.993	7.492	1.00	0.00
ATOM 1008	C	PHE A	72	156.433	4.968	8.045	1.00	0.00
ATOM 1009	O	PHE A	72	157.368	4.556	7.358	1.00	0.00
ATOM 1010	CB	PHE A	72	154.057	5.368	7.373	1.00	0.00
ATOM 1011	CG	PHE A	72	153.981	4.262	6.359	1.00	0.00
ATOM 1012	CD1	PHE A	72	154.205	2.946	6.733	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.686	4.538	5.034	1.00	0.00
ATOM 1014	CE1	PHE A	72	154.135	1.926	5.802	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.616	3.522	4.099	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.841	2.214	4.484	1.00	0.00
ATOM 1017	H	PHE A	72	156.226	5.859	5.528	1.00	0.00

ATOM 1018	HA	PHE A	72	155.399	6.831	8.172	1.00	0.00
ATOM 1019	1HB	PHE A	72	153.769	4.961	8.330	1.00	0.00
ATOM 1020	2HB	PHE A	72	153.350	6.133	7.084	1.00	0.00
ATOM 1021	HD1	PHE A	72	154.434	2.719	7.763	1.00	0.00
ATOM 1022	HD2	PHE A	72	153.511	5.560	4.731	1.00	0.00
ATOM 1023	HE1	PHE A	72	154.311	0.905	6.106	1.00	0.00
ATOM 1024	HE2	PHE A	72	153.386	3.751	3.069	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.786	1.419	3.756	1.00	0.00
ATOM 1026	N	THR A	73	156.216	4.559	9.291	1.00	0.00
ATOM 1027	CA	THR A	73	157.085	3.581	9.937	1.00	0.00
ATOM 1028	C	THR A	73	156.374	2.242	10.094	1.00	0.00
ATOM 1029	O	THR A	73	155.396	2.129	10.834	1.00	0.00
ATOM 1030	CB	THR A	73	157.538	4.094	11.304	1.00	0.00
ATOM 1031	OG1	THR A	73	157.838	5.477	11.247	1.00	0.00
ATOM 1032	CG2	THR A	73	158.761	3.380	11.837	1.00	0.00
ATOM 1033	H	THR A	73	155.455	4.923	9.789	1.00	0.00
ATOM 1034	HA	THR A	73	157.952	3.443	9.309	1.00	0.00
ATOM 1035	HB	THR A	73	156.736	3.951	12.015	1.00	0.00
ATOM 1036	HG1	THR A	73	157.472	5.918	12.018	1.00	0.00
ATOM 1037	1HG2	THR A	73	159.373	4.077	12.389	1.00	0.00
ATOM 1038	2HG2	THR A	73	159.331	2.978	11.011	1.00	0.00
ATOM 1039	3HG2	THR A	73	158.454	2.575	12.487	1.00	0.00
ATOM 1040	N	CYS A	74	156.871	1.227	9.394	1.00	0.00
ATOM 1041	CA	CYS A	74	156.282	-0.106	9.455	1.00	0.00
ATOM 1042	C	CYS A	74	157.366	-1.179	9.459	1.00	0.00
ATOM 1043	O	CYS A	74	158.558	-0.871	9.475	1.00	0.00
ATOM 1044	CB	CYS A	74	155.336	-0.324	8.272	1.00	0.00
ATOM 1045	SG	CYS A	74	153.626	0.165	8.594	1.00	0.00
ATOM 1046	H	CYS A	74	157.652	1.380	8.821	1.00	0.00

ATOM 1047	HA	CYS A	74	155.718	-0.177	10.373	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.688	0.251	7.429	1.00	0.00
ATOM 1049	2HB	CYS A	74	155.336	-1.372	8.011	1.00	0.00
ATOM 1050	HG	CYS A	74	153.519	0.260	9.543	1.00	0.00
ATOM 1051	N	ALA A	75	156.944	-2.438	9.446	1.00	0.00
ATOM 1052	CA	ALA A	75	157.878	-3.557	9.448	1.00	0.00
ATOM 1053	C	ALA A	75	158.504	-3.753	8.071	1.00	0.00
ATOM 1054	O	ALA A	75	158.021	-3.212	7.077	1.00	0.00
ATOM 1055	CB	ALA A	75	157.177	-4.830	9.897	1.00	0.00
ATOM 1056	H	ALA A	75	155.981	-2.620	9.434	1.00	0.00
ATOM 1057	HA	ALA A	75	158.661	-3.336	10.159	1.00	0.00
ATOM 1058	1HB	ALA A	75	156.438	-4.588	10.647	1.00	0.00
ATOM 1059	2HB	ALA A	75	157.902	-5.513	10.314	1.00	0.00
ATOM 1060	3HB	ALA A	75	156.692	-5.292	9.049	1.00	0.00
ATOM 1061	N	LEU A	76	159.581	-4.530	8.021	1.00	0.00
ATOM 1062	CA	LEU A	76	160.273	-4.798	6.765	1.00	0.00
ATOM 1063	C	LEU A	76	159.514	-5.828	5.935	1.00	0.00
ATOM 1064	O	LEU A	76	158.956	-6.784	6.473	1.00	0.00
ATOM 1065	CB	LEU A	76	161.695	-5.292	7.037	1.00	0.00
ATOM 1066	CG	LEU A	76	162.712	-4.195	7.352	1.00	0.00
ATOM 1067	CD1	LEU A	76	163.770	-4.708	8.317	1.00	0.00
ATOM 1068	CD2	LEU A	76	163.358	-3.686	6.072	1.00	0.00
ATOM 1069	H	LEU A	76	159.919	-4.933	8.848	1.00	0.00
ATOM 1070	HA	LEU A	76	160.323	-3.872	6.212	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.661	-5.975	7.874	1.00	0.00
ATOM 1072	2HB	LEU A	76	162.038	-5.832	6.168	1.00	0.00
ATOM 1073	HG	LEU A	76	162.204	-3.366	7.824	1.00	0.00
ATOM 1074	1HD1	LEU A	76	164.717	-4.240	8.096	1.00	0.00
ATOM 1075	2HD1	LEU A	76	163.865	-5.779	8.210	1.00	0.00

ATOM 1076	3HD1	LEU A	76	163.478	-4.472	9.330	1.00	0.00
ATOM 1077	1HD2	LEU A	76	162.688	-3.851	5.241	1.00	0.00
ATOM 1078	2HD2	LEU A	76	164.282	-4.216	5.899	1.00	0.00
ATOM 1079	3HD2	LEU A	76	163.562	-2.630	6.166	1.00	0.00
ATOM 1080	N	LYS A	77	159.498	-5.627	4.621	1.00	0.00
ATOM 1081	CA	LYS A	77	158.807	-6.538	3.716	1.00	0.00
ATOM 1082	C	LYS A	77	157.311	-6.563	4.005	1.00	0.00
ATOM 1083	O	LYS A	77	156.676	-7.618	3.962	1.00	0.00
ATOM 1084	CB	LYS A	77	159.387	-7.948	3.836	1.00	0.00
ATOM 1085	CG	LYS A	77	160.907	-7.984	3.832	1.00	0.00
ATOM 1086	CD	LYS A	77	161.469	-7.583	2.478	1.00	0.00
ATOM 1087	CE	LYS A	77	162.944	-7.228	2.570	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.150	-5.792	2.908	1.00	0.00
ATOM 1089	H	LYS A	77	159.962	-4.846	4.252	1.00	0.00
ATOM 1090	HA	LYS A	77	158.960	-6.181	2.707	1.00	0.00
ATOM 1091	1HB	LYS A	77	159.041	-8.389	4.760	1.00	0.00
ATOM 1092	2HB	LYS A	77	159.033	-8.544	3.008	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.275	-7.299	4.580	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.235	-8.987	4.066	1.00	0.00
ATOM 1095	1HD	LYS A	77	161.351	-8.408	1.791	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.924	-6.726	2.112	1.00	0.00
ATOM 1097	1HE	LYS A	77	163.401	-7.837	3.337	1.00	0.00
ATOM 1098	2HE	LYS A	77	163.412	-7.436	1.619	1.00	0.00
ATOM 1099	1HZ	LYS A	77	163.311	-5.241	2.041	1.00	0.00
ATOM 1100	2HZ	LYS A	77	163.976	-5.686	3.531	1.00	0.00
ATOM 1101	3HZ	LYS A	77	162.312	-5.416	3.395	1.00	0.00
ATOM 1102	N	LYS A	78	156.750	-5.395	4.301	1.00	0.00
ATOM 1103	CA	LYS A	78	155.326	-5.284	4.597	1.00	0.00
ATOM 1104	C	LYS A	78	154.793	-3.911	4.198	1.00	0.00



ATOM 1105 O LYS A 78 153.981 -3.318 4.908 1.00 0.00  
ATOM 1106 CB LYS A 78 155.074 -5.529 6.086 1.00 0.00  
ATOM 1107 CG LYS A 78 155.640 -6.847 6.590 1.00 0.00  
ATOM 1108 CD LYS A 78 155.270 -7.094 8.043 1.00 0.00  
ATOM 1109 CE LYS A 78 154.151 -8.116 8.169 1.00 0.00  
ATOM 1110 NZ LYS A 78 153.312 -7.875 9.376 1.00 0.00  
ATOM 1111 H LYS A 78 157.306 -4.589 4.318 1.00 0.00  
ATOM 1112 HA LYS A 78 154.809 -6.038 4.024 1.00 0.00  
ATOM 1113 1HB LYS A 78 155.525 -4.728 6.653 1.00 0.00  
ATOM 1114 2HB LYS A 78 154.009 -5.529 6.264 1.00 0.00  
ATOM 1115 1HG LYS A 78 155.244 -7.651 5.986 1.00 0.00  
ATOM 1116 2HG LYS A 78 156.716 -6.823 6.500 1.00 0.00  
ATOM 1117 1HD LYS A 78 156.139 -7.463 8.568 1.00 0.00  
ATOM 1118 2HD LYS A 78 154.947 -6.164 8.487 1.00 0.00  
ATOM 1119 1HE LYS A 78 153.526 -8.055 7.291 1.00 0.00  
ATOM 1120 2HE LYS A 78 154.586 -9.102 8.234 1.00 0.00  
ATOM 1121 1HZ LYS A 78 153.289 -6.859 9.599 1.00 0.00  
ATOM 1122 2HZ LYS A 78 153.703 -8.388 10.191 1.00 0.00  
ATOM 1123 3HZ LYS A 78 152.341 -8.205 9.207 1.00 0.00  
ATOM 1124 N ALA A 79 155.255 -3.413 3.056 1.00 0.00  
ATOM 1125 CA ALA A 79 154.824 -2.111 2.561 1.00 0.00  
ATOM 1126 C ALA A 79 154.652 -2.129 1.047 1.00 0.00  
ATOM 1127 O ALA A 79 155.630 -2.201 0.301 1.00 0.00  
ATOM 1128 CB ALA A 79 155.822 -1.036 2.968 1.00 0.00  
ATOM 1129 H ALA A 79 155.901 -3.932 2.534 1.00 0.00  
ATOM 1130 HA ALA A 79 153.874 -1.878 3.019 1.00 0.00  
ATOM 1131 1HB ALA A 79 155.857 -0.270 2.207 1.00 0.00  
ATOM 1132 2HB ALA A 79 156.801 -1.477 3.080 1.00 0.00  
ATOM 1133 3HB ALA A 79 155.515 -0.597 3.906 1.00 0.00

ATOM 1134	N	LEU A	80	153.404	-2.063	0.597	1.00	0.00
ATOM 1135	CA	LEU A	80	153.103	-2.072	-0.829	1.00	0.00
ATOM 1136	C	LEU A	80	152.276	-0.851	-1.218	1.00	0.00
ATOM 1137	O	LEU A	80	151.095	-0.756	-0.884	1.00	0.00
ATOM 1138	CB	LEU A	80	152.352	-3.352	-1.205	1.00	0.00
ATOM 1139	CG	LEU A	80	151.922	-3.444	-2.670	1.00	0.00
ATOM 1140	CD1	LEU A	80	153.135	-3.587	-3.575	1.00	0.00
ATOM 1141	CD2	LEU A	80	150.964	-4.609	-2.871	1.00	0.00
ATOM 1142	H	LEU A	80	152.667	-2.007	1.240	1.00	0.00
ATOM 1143	HA	LEU A	80	154.039	-2.044	-1.367	1.00	0.00
ATOM 1144	1HB	LEU A	80	152.990	-4.195	-0.985	1.00	0.00
ATOM 1145	2HB	LEU A	80	151.468	-3.420	-0.589	1.00	0.00
ATOM 1146	HG	LEU A	80	151.406	-2.535	-2.944	1.00	0.00
ATOM 1147	1HD1	LEU A	80	152.858	-4.131	-4.466	1.00	0.00
ATOM 1148	2HD1	LEU A	80	153.913	-4.124	-3.052	1.00	0.00
ATOM 1149	3HD1	LEU A	80	153.497	-2.607	-3.850	1.00	0.00
ATOM 1150	1HD2	LEU A	80	151.527	-5.499	-3.113	1.00	0.00
ATOM 1151	2HD2	LEU A	80	150.285	-4.382	-3.679	1.00	0.00
ATOM 1152	3HD2	LEU A	80	150.403	-4.774	-1.963	1.00	0.00
ATOM 1153	N	PHE A	81	152.905	0.081	-1.927	1.00	0.00
ATOM 1154	CA	PHE A	81	152.227	1.297	-2.362	1.00	0.00
ATOM 1155	C	PHE A	81	151.405	1.041	-3.622	1.00	0.00
ATOM 1156	O	PHE A	81	151.884	0.420	-4.571	1.00	0.00
ATOM 1157	CB	PHE A	81	153.246	2.408	-2.621	1.00	0.00
ATOM 1158	CG	PHE A	81	153.856	2.967	-1.367	1.00	0.00
ATOM 1159	CD1	PHE A	81	153.201	3.948	-0.640	1.00	0.00
ATOM 1160	CD2	PHE A	81	155.084	2.511	-0.916	1.00	0.00
ATOM 1161	CE1	PHE A	81	153.759	4.463	0.514	1.00	0.00
ATOM 1162	CE2	PHE A	81	155.649	3.023	0.237	1.00	0.00

ATOM 1163	CZ	PHE A	81	154.985	4.000	0.953	1.00	0.00
ATOM 1164	H	PHE A	81	153.846	-0.052	-2.164	1.00	0.00
ATOM 1165	HA	PHE A	81	151.563	1.607	-1.570	1.00	0.00
ATOM 1166	1HB	PHE A	81	154.045	2.019	-3.234	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.759	3.218	-3.145	1.00	0.00
ATOM 1168	HD1	PHE A	81	152.243	4.310	-0.982	1.00	0.00
ATOM 1169	HD2	PHE A	81	155.604	1.747	-1.476	1.00	0.00
ATOM 1170	HE1	PHE A	81	153.240	5.228	1.072	1.00	0.00
ATOM 1171	HE2	PHE A	81	156.607	2.659	0.578	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.424	4.401	1.854	1.00	0.00
ATOM 1173	N	VAL A	82	150.167	1.524	-3.623	1.00	0.00
ATOM 1174	CA	VAL A	82	149.280	1.347	-4.765	1.00	0.00
ATOM 1175	C	VAL A	82	148.315	2.521	-4.898	1.00	0.00
ATOM 1176	O	VAL A	82	148.180	3.332	-3.983	1.00	0.00
ATOM 1177	CB	VAL A	82	148.470	0.042	-4.652	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.379	-1.166	-4.809	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.724	-0.010	-3.327	1.00	0.00
ATOM 1180	H	VAL A	82	149.843	2.010	-2.836	1.00	0.00
ATOM 1181	HA	VAL A	82	149.889	1.292	-5.656	1.00	0.00
ATOM 1182	HB	VAL A	82	147.742	0.022	-5.450	1.00	0.00
ATOM 1183	1HG1	VAL A	82	150.018	-1.028	-5.668	1.00	0.00
ATOM 1184	2HG1	VAL A	82	148.779	-2.054	-4.947	1.00	0.00
ATOM 1185	3HG1	VAL A	82	149.987	-1.278	-3.923	1.00	0.00
ATOM 1186	1HG2	VAL A	82	147.242	-0.971	-3.223	1.00	0.00
ATOM 1187	2HG2	VAL A	82	146.979	0.771	-3.303	1.00	0.00
ATOM 1188	3HG2	VAL A	82	148.422	0.131	-2.515	1.00	0.00
ATOM 1189	N	LYS A	83	147.645	2.602	-6.043	1.00	0.00
ATOM 1190	CA	LYS A	83	146.693	3.677	-6.295	1.00	0.00
ATOM 1191	C	LYS A	83	145.494	3.573	-5.358	1.00	0.00

ATOM 1192	O	LYS A	83	144.809	2.552	-5.318	1.00	0.00
ATOM 1193	CB	LYS A	83	146.223	3.638	-7.751	1.00	0.00
ATOM 1194	CG	LYS A	83	147.353	3.770	-8.758	1.00	0.00
ATOM 1195	CD	LYS A	83	146.881	3.453	-10.168	1.00	0.00
ATOM 1196	CE	LYS A	83	147.739	4.151	-11.212	1.00	0.00
ATOM 1197	NZ	LYS A	83	148.766	3.239	-11.787	1.00	0.00
ATOM 1198	H	LYS A	83	147.796	1.924	-6.735	1.00	0.00
ATOM 1199	HA	LYS A	83	147.196	4.615	-6.114	1.00	0.00
ATOM 1200	1HB	LYS A	83	145.717	2.701	-7.929	1.00	0.00
ATOM 1201	2HB	LYS A	83	145.528	4.449	-7.914	1.00	0.00
ATOM 1202	1HG	LYS A	83	147.728	4.782	-8.734	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.143	3.085	-8.489	1.00	0.00
ATOM 1204	1HD	LYS A	83	146.938	2.386	-10.325	1.00	0.00
ATOM 1205	2HD	LYS A	83	145.858	3.782	-10.277	1.00	0.00
ATOM 1206	1HE	LYS A	83	147.099	4.504	-12.007	1.00	0.00
ATOM 1207	2HE	LYS A	83	148.234	4.991	-10.749	1.00	0.00
ATOM 1208	1HZ	LYS A	83	148.971	2.466	-11.121	1.00	0.00
ATOM 1209	2HZ	LYS A	83	149.645	3.761	-11.974	1.00	0.00
ATOM 1210	3HZ	LYS A	83	148.422	2.831	-12.680	1.00	0.00
ATOM 1211	N	LEU A	84	145.250	4.640	-4.605	1.00	0.00
ATOM 1212	CA	LEU A	84	144.136	4.675	-3.666	1.00	0.00
ATOM 1213	C	LEU A	84	142.808	4.456	-4.384	1.00	0.00
ATOM 1214	O	LEU A	84	141.894	3.832	-3.844	1.00	0.00
ATOM 1215	CB	LEU A	84	144.115	6.015	-2.924	1.00	0.00
ATOM 1216	CG	LEU A	84	142.921	6.222	-1.990	1.00	0.00
ATOM 1217	CD1	LEU A	84	143.105	5.434	-0.703	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.732	7.702	-1.689	1.00	0.00
ATOM 1219	H	LEU A	84	145.833	5.423	-4.683	1.00	0.00
ATOM 1220	HA	LEU A	84	144.280	3.880	-2.950	1.00	0.00

ATOM 1221	1HB	LEU A	84	145.020	6.091	-2.340	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.112	6.807	-3.658	1.00	0.00
ATOM 1223	HG	LEU A	84	142.025	5.863	-2.476	1.00	0.00
ATOM 1224	1HD1	LEU A	84	142.152	5.045	-0.380	1.00	0.00
ATOM 1225	2HD1	LEU A	84	143.508	6.082	0.061	1.00	0.00
ATOM 1226	3HD1	LEU A	84	143.789	4.616	-0.878	1.00	0.00
ATOM 1227	1HD2	LEU A	84	142.418	8.215	-2.586	1.00	0.00
ATOM 1228	2HD2	LEU A	84	143.667	8.121	-1.345	1.00	0.00
ATOM 1229	3HD2	LEU A	84	141.981	7.821	-0.924	1.00	0.00
ATOM 1230	N	LYS A	85	142.708	4.971	-5.606	1.00	0.00
ATOM 1231	CA	LYS A	85	141.491	4.830	-6.398	1.00	0.00
ATOM 1232	C	LYS A	85	141.220	3.365	-6.728	1.00	0.00
ATOM 1233	O	LYS A	85	140.075	2.975	-6.956	1.00	0.00
ATOM 1234	CB	LYS A	85	141.602	5.645	-7.688	1.00	0.00
ATOM 1235	CG	LYS A	85	142.793	5.264	-8.549	1.00	0.00
ATOM 1236	CD	LYS A	85	143.264	6.434	-9.398	1.00	0.00
ATOM 1237	CE	LYS A	85	144.650	6.186	-9.970	1.00	0.00
ATOM 1238	NZ	LYS A	85	145.138	7.346	-10.766	1.00	0.00
ATOM 1239	H	LYS A	85	143.471	5.458	-5.982	1.00	0.00
ATOM 1240	HA	LYS A	85	140.670	5.213	-5.811	1.00	0.00
ATOM 1241	1HB	LYS A	85	140.702	5.500	-8.269	1.00	0.00
ATOM 1242	2HB	LYS A	85	141.690	6.691	-7.433	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.602	4.949	-7.909	1.00	0.00
ATOM 1244	2HG	LYS A	85	142.509	4.449	-9.200	1.00	0.00
ATOM 1245	1HD	LYS A	85	142.570	6.576	-10.214	1.00	0.00
ATOM 1246	2HD	LYS A	85	143.289	7.323	-8.786	1.00	0.00
ATOM 1247	1HE	LYS A	85	145.335	6.008	-9.154	1.00	0.00
ATOM 1248	2HE	LYS A	85	144.613	5.314	-10.605	1.00	0.00
ATOM 1249	1HZ	LYS A	85	146.175	7.409	-10.708	1.00	0.00

ATOM 1250	2HZ	LYS A	85	144.728	8.229	-10.401	1.00	0.00
ATOM 1251	3HZ	LYS A	85	144.863	7.236	-11.763	1.00	0.00
ATOM 1252	N	SER A	86	142.277	2.559	-6.753	1.00	0.00
ATOM 1253	CA	SER A	86	142.146	1.139	-7.057	1.00	0.00
ATOM 1254	C	SER A	86	142.102	0.309	-5.777	1.00	0.00
ATOM 1255	O	SER A	86	142.605	-0.814	-5.737	1.00	0.00
ATOM 1256	CB	SER A	86	143.308	0.676	-7.938	1.00	0.00
ATOM 1257	OG	SER A	86	143.567	1.608	-8.973	1.00	0.00
ATOM 1258	H	SER A	86	143.165	2.928	-6.563	1.00	0.00
ATOM 1259	HA	SER A	86	141.220	0.999	-7.594	1.00	0.00
ATOM 1260	1HB	SER A	86	144.197	0.572	-7.334	1.00	0.00
ATOM 1261	2HB	SER A	86	143.062	-0.278	-8.382	1.00	0.00
ATOM 1262	HG	SER A	86	143.066	1.365	-9.755	1.00	0.00
ATOM 1263	N	CYS A	87	141.498	0.868	-4.734	1.00	0.00
ATOM 1264	CA	CYS A	87	141.387	0.180	-3.453	1.00	0.00
ATOM 1265	C	CYS A	87	139.928	-0.097	-3.109	1.00	0.00
ATOM 1266	O	CYS A	87	139.021	0.538	-3.648	1.00	0.00
ATOM 1267	CB	CYS A	87	142.036	1.012	-2.345	1.00	0.00
ATOM 1268	SG	CYS A	87	143.843	1.034	-2.401	1.00	0.00
ATOM 1269	H	CYS A	87	141.116	1.766	-4.828	1.00	0.00
ATOM 1270	HA	CYS A	87	141.910	-0.761	-3.537	1.00	0.00
ATOM 1271	1HB	CYS A	87	141.693	2.032	-2.424	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.740	0.613	-1.386	1.00	0.00
ATOM 1273	HG	CYS A	87	144.122	0.522	-3.164	1.00	0.00
ATOM 1274	N	ARG A	88	139.706	-1.049	-2.208	1.00	0.00
ATOM 1275	CA	ARG A	88	138.356	-1.408	-1.793	1.00	0.00
ATOM 1276	C	ARG A	88	138.267	-1.531	-0.272	1.00	0.00
ATOM 1277	O	ARG A	88	139.211	-1.983	0.376	1.00	0.00
ATOM 1278	CB	ARG A	88	137.932	-2.723	-2.448	1.00	0.00

ATOM 1279	CG	ARG A	88	137.230	-2.538	-3.784	1.00	0.00
ATOM 1280	CD	ARG A	88	135.718	-2.566	-3.627	1.00	0.00
ATOM 1281	NE	ARG A	88	135.059	-3.157	-4.789	1.00	0.00
ATOM 1282	CZ	ARG A	88	135.003	-2.577	-5.985	1.00	0.00
ATOM 1283	NH1	ARG A	88	135.566	-1.391	-6.183	1.00	0.00
ATOM 1284	NH2	ARG A	88	134.382	-3.184	-6.987	1.00	0.00
ATOM 1285	H	ARG A	88	140.470	-1.520	-1.812	1.00	0.00
ATOM 1286	HA	ARG A	88	137.691	-0.623	-2.119	1.00	0.00
ATOM 1287	1HB	ARG A	88	138.810	-3.332	-2.608	1.00	0.00
ATOM 1288	2HB	ARG A	88	137.260	-3.244	-1.782	1.00	0.00
ATOM 1289	1HG	ARG A	88	137.521	-1.587	-4.204	1.00	0.00
ATOM 1290	2HG	ARG A	88	137.529	-3.335	-4.449	1.00	0.00
ATOM 1291	1HD	ARG A	88	135.471	-3.146	-2.750	1.00	0.00
ATOM 1292	2HD	ARG A	88	135.364	-1.553	-3.501	1.00	0.00
ATOM 1293	HE	ARG A	88	134.634	-4.033	-4.672	1.00	0.00
ATOM 1294	1HH1	ARG A	88	136.035	-0.928	-5.431	1.00	0.00
ATOM 1295	2HH1	ARG A	88	135.520	-0.961	-7.084	1.00	0.00
ATOM 1296	1HH2	ARG A	88	133.956	-4.077	-6.844	1.00	0.00
ATOM 1297	2HH2	ARG A	88	134.340	-2.748	-7.887	1.00	0.00
ATOM 1298	N	PRO A	89	137.126	-1.131	0.319	1.00	0.00
ATOM 1299	CA	PRO A	89	136.924	-1.201	1.769	1.00	0.00
ATOM 1300	C	PRO A	89	137.168	-2.603	2.320	1.00	0.00
ATOM 1301	O	PRO A	89	136.530	-3.566	1.898	1.00	0.00
ATOM 1302	CB	PRO A	89	135.455	-0.807	1.948	1.00	0.00
ATOM 1303	CG	PRO A	89	135.126	-0.003	0.740	1.00	0.00
ATOM 1304	CD	PRO A	89	135.949	-0.581	-0.377	1.00	0.00
ATOM 1305	HA	PRO A	89	137.555	-0.497	2.291	1.00	0.00
ATOM 1306	1HB	PRO A	89	134.846	-1.698	2.009	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.343	-0.225	2.851	1.00	0.00

ATOM 1308	1HG	PRO A	89	134.074	-0.091	0.515	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.390	1.031	0.903	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.401	-1.361	-0.886	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.239	0.195	-1.072	1.00	0.00
ATOM 1312	N	ASP A	90	138.095	-2.707	3.267	1.00	0.00
ATOM 1313	CA	ASP A	90	138.422	-3.991	3.877	1.00	0.00
ATOM 1314	C	ASP A	90	137.795	-4.110	5.262	1.00	0.00
ATOM 1315	O	ASP A	90	138.296	-3.540	6.232	1.00	0.00
ATOM 1316	CB	ASP A	90	139.940	-4.160	3.977	1.00	0.00
ATOM 1317	CG	ASP A	90	140.365	-5.614	3.896	1.00	0.00
ATOM 1318	OD1	ASP A	90	139.547	-6.492	4.244	1.00	0.00
ATOM 1319	OD2	ASP A	90	141.516	-5.873	3.485	1.00	0.00
ATOM 1320	H	ASP A	90	138.570	-1.902	3.563	1.00	0.00
ATOM 1321	HA	ASP A	90	138.023	-4.769	3.245	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.410	-3.622	3.168	1.00	0.00
ATOM 1323	2HB	ASP A	90	140.279	-3.756	4.919	1.00	0.00
ATOM 1324	N	SER A	91	136.695	-4.850	5.346	1.00	0.00
ATOM 1325	CA	SER A	91	135.997	-5.042	6.613	1.00	0.00
ATOM 1326	C	SER A	91	136.378	-6.376	7.247	1.00	0.00
ATOM 1327	O	SER A	91	135.575	-6.993	7.947	1.00	0.00
ATOM 1328	CB	SER A	91	134.485	-4.978	6.401	1.00	0.00
ATOM 1329	OG	SER A	91	133.828	-4.483	7.554	1.00	0.00
ATOM 1330	H	SER A	91	136.343	-5.278	4.537	1.00	0.00
ATOM 1331	HA	SER A	91	136.293	-4.243	7.277	1.00	0.00
ATOM 1332	1HB	SER A	91	134.267	-4.326	5.569	1.00	0.00
ATOM 1333	2HB	SER A	91	134.112	-5.970	6.187	1.00	0.00
ATOM 1334	HG	SER A	91	133.100	-5.065	7.784	1.00	0.00
ATOM 1335	N	ARG A	92	137.608	-6.815	6.999	1.00	0.00
ATOM 1336	CA	ARG A	92	138.093	-8.076	7.546	1.00	0.00



ATOM 1337	C	ARG A	92	138.164	-8.018	9.069	1.00	0.00
ATOM 1338	O	ARG A	92	137.993	-9.030	9.748	1.00	0.00
ATOM 1339	CB	ARG A	92	139.471	-8.409	6.972	1.00	0.00
ATOM 1340	CG	ARG A	92	139.416	-9.230	5.695	1.00	0.00
ATOM 1341	CD	ARG A	92	139.022	-10.671	5.976	1.00	0.00
ATOM 1342	NE	ARG A	92	137.589	-10.891	5.797	1.00	0.00
ATOM 1343	CZ	ARG A	92	137.005	-11.048	4.612	1.00	0.00
ATOM 1344	NH1	ARG A	92	137.727	-11.011	3.498	1.00	0.00
ATOM 1345	NH2	ARG A	92	135.696	-11.243	4.538	1.00	0.00
ATOM 1346	H	ARG A	92	138.202	-6.278	6.434	1.00	0.00
ATOM 1347	HA	ARG A	92	137.398	-8.851	7.260	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.992	-7.486	6.760	1.00	0.00
ATOM 1349	2HB	ARG A	92	140.030	-8.966	7.709	1.00	0.00
ATOM 1350	1HG	ARG A	92	138.688	-8.792	5.028	1.00	0.00
ATOM 1351	2HG	ARG A	92	140.390	-9.216	5.227	1.00	0.00
ATOM 1352	1HD	ARG A	92	139.562	-11.318	5.300	1.00	0.00
ATOM 1353	2HD	ARG A	92	139.290	-10.912	6.994	1.00	0.00
ATOM 1354	HE	ARG A	92	137.032	-10.923	6.603	1.00	0.00
ATOM 1355	1HH1	ARG A	92	138.714	-10.864	3.546	1.00	0.00
ATOM 1356	2HH1	ARG A	92	137.282	-11.130	2.611	1.00	0.00
ATOM 1357	1HH2	ARG A	92	135.147	-11.273	5.374	1.00	0.00
ATOM 1358	2HH2	ARG A	92	135.256	-11.362	3.648	1.00	0.00
ATOM 1359	N	PHE A	93	138.419	-6.825	9.599	1.00	0.00
ATOM 1360	CA	PHE A	93	138.513	-6.636	11.042	1.00	0.00
ATOM 1361	C	PHE A	93	137.293	-5.889	11.574	1.00	0.00
ATOM 1362	O	PHE A	93	137.385	-5.153	12.557	1.00	0.00
ATOM 1363	CB	PHE A	93	139.788	-5.868	11.393	1.00	0.00
ATOM 1364	CG	PHE A	93	141.045	-6.662	11.179	1.00	0.00
ATOM 1365	CD1	PHE A	93	141.370	-7.144	9.921	1.00	0.00

ATOM 1366	CD2	PHE A	93	141.902	-6.927	12.236	1.00	0.00
ATOM 1367	CE1	PHE A	93	142.526	-7.875	9.721	1.00	0.00
ATOM 1368	CE2	PHE A	93	143.059	-7.658	12.041	1.00	0.00
ATOM 1369	CZ	PHE A	93	143.371	-8.132	10.782	1.00	0.00
ATOM 1370	H	PHE A	93	138.546	-6.056	9.006	1.00	0.00
ATOM 1371	HA	PHE A	93	138.552	-7.611	11.502	1.00	0.00
ATOM 1372	1HB	PHE A	93	139.848	-4.982	10.780	1.00	0.00
ATOM 1373	2HB	PHE A	93	139.751	-5.578	12.433	1.00	0.00
ATOM 1374	HD1	PHE A	93	140.710	-6.943	9.090	1.00	0.00
ATOM 1375	HD2	PHE A	93	141.658	-6.557	13.220	1.00	0.00
ATOM 1376	HE1	PHE A	93	142.768	-8.246	8.735	1.00	0.00
ATOM 1377	HE2	PHE A	93	143.718	-7.857	12.873	1.00	0.00
ATOM 1378	HZ	PHE A	93	144.275	-8.704	10.629	1.00	0.00
ATOM 1379	N	ALA A	94	136.153	-6.084	10.920	1.00	0.00
ATOM 1380	CA	ALA A	94	134.917	-5.429	11.329	1.00	0.00
ATOM 1381	C	ALA A	94	134.552	-5.791	12.766	1.00	0.00
ATOM 1382	O	ALA A	94	134.390	-6.965	13.099	1.00	0.00
ATOM 1383	CB	ALA A	94	133.784	-5.803	10.384	1.00	0.00
ATOM 1384	H	ALA A	94	136.142	-6.682	10.143	1.00	0.00
ATOM 1385	HA	ALA A	94	135.069	-4.361	11.267	1.00	0.00
ATOM 1386	1HB	ALA A	94	134.071	-6.665	9.802	1.00	0.00
ATOM 1387	2HB	ALA A	94	133.579	-4.974	9.722	1.00	0.00
ATOM 1388	3HB	ALA A	94	132.897	-6.034	10.956	1.00	0.00
ATOM 1389	N	SER A	95	134.426	-4.775	13.614	1.00	0.00
ATOM 1390	CA	SER A	95	134.082	-4.987	15.014	1.00	0.00
ATOM 1391	C	SER A	95	132.642	-4.567	15.290	1.00	0.00
ATOM 1392	O	SER A	95	132.089	-3.714	14.596	1.00	0.00
ATOM 1393	CB	SER A	95	135.036	-4.205	15.920	1.00	0.00
ATOM 1394	OG	SER A	95	136.145	-5.000	16.300	1.00	0.00

ATOM 1395	H	SER A	95	134.568	-3.861	13.289	1.00	0.00
ATOM 1396	HA	SER A	95	134.184	-6.041	15.225	1.00	0.00
ATOM 1397	1HB	SER A	95	135.397	-3.335	15.392	1.00	0.00
ATOM 1398	2HB	SER A	95	134.509	-3.893	16.809	1.00	0.00
ATOM 1399	HG	SER A	95	136.483	-5.467	15.533	1.00	0.00
ATOM 1400	N	LEU A	96	132.039	-5.172	16.308	1.00	0.00
ATOM 1401	CA	LEU A	96	130.663	-4.861	16.676	1.00	0.00
ATOM 1402	C	LEU A	96	130.285	-5.533	17.992	1.00	0.00
ATOM 1403	O	LEU A	96	129.953	-6.718	18.023	1.00	0.00
ATOM 1404	CB	LEU A	96	129.704	-5.307	15.570	1.00	0.00
ATOM 1405	CG	LEU A	96	128.495	-4.395	15.355	1.00	0.00
ATOM 1406	CD1	LEU A	96	127.882	-4.636	13.984	1.00	0.00
ATOM 1407	CD2	LEU A	96	127.462	-4.613	16.450	1.00	0.00
ATOM 1408	H	LEU A	96	132.531	-5.845	16.825	1.00	0.00
ATOM 1409	HA	LEU A	96	130.586	-3.792	16.797	1.00	0.00
ATOM 1410	1HB	LEU A	96	130.258	-5.361	14.644	1.00	0.00
ATOM 1411	2HB	LEU A	96	129.341	-6.295	15.812	1.00	0.00
ATOM 1412	HG	LEU A	96	128.817	-3.364	15.399	1.00	0.00
ATOM 1413	1HD1	LEU A	96	128.625	-5.066	13.328	1.00	0.00
ATOM 1414	2HD1	LEU A	96	127.538	-3.698	13.573	1.00	0.00
ATOM 1415	3HD1	LEU A	96	127.048	-5.315	14.077	1.00	0.00
ATOM 1416	1HD2	LEU A	96	127.130	-5.641	16.431	1.00	0.00
ATOM 1417	2HD2	LEU A	96	126.618	-3.960	16.283	1.00	0.00
ATOM 1418	3HD2	LEU A	96	127.903	-4.395	17.410	1.00	0.00
ATOM 1419	N	GLN A	97	130.339	-4.769	19.079	1.00	0.00
ATOM 1420	CA	GLN A	97	130.002	-5.290	20.398	1.00	0.00
ATOM 1421	C	GLN A	97	130.929	-6.442	20.781	1.00	0.00
ATOM 1422	O	GLN A	97	131.595	-7.024	19.925	1.00	0.00
ATOM 1423	CB	GLN A	97	128.547	-5.759	20.427	1.00	0.00

ATOM 1424	CG	GLN A	97	127.566	-4.676	20.847	1.00	0.00
ATOM 1425	CD	GLN A	97	126.204	-4.841	20.203	1.00	0.00
ATOM 1426	OE1	GLN A	97	126.054	-4.681	18.992	1.00	0.00
ATOM 1427	NE2	GLN A	97	125.201	-5.162	21.013	1.00	0.00
ATOM 1428	H	GLN A	97	130.611	-3.831	18.990	1.00	0.00
ATOM 1429	HA	GLN A	97	130.127	-4.490	21.112	1.00	0.00
ATOM 1430	1HB	GLN A	97	128.271	-6.100	19.441	1.00	0.00
ATOM 1431	2HB	GLN A	97	128.459	-6.583	21.121	1.00	0.00
ATOM 1432	1HG	GLN A	97	127.447	-4.713	21.920	1.00	0.00
ATOM 1433	2HG	GLN A	97	127.970	-3.714	20.564	1.00	0.00
ATOM 1434	1HE2	GLN A	97	125.395	-5.274	21.967	1.00	0.00
ATOM 1435	2HE2	GLN A	97	124.310	-5.275	20.622	1.00	0.00
ATOM 1436	N	PRO A	98	130.983	-6.785	22.080	1.00	0.00
ATOM 1437	CA	PRO A	98	131.833	-7.874	22.573	1.00	0.00
ATOM 1438	C	PRO A	98	131.336	-9.245	22.127	1.00	0.00
ATOM 1439	O	PRO A	98	130.179	-9.599	22.350	1.00	0.00
ATOM 1440	CB	PRO A	98	131.737	-7.739	24.095	1.00	0.00
ATOM 1441	CG	PRO A	98	130.430	-7.067	24.333	1.00	0.00
ATOM 1442	CD	PRO A	98	130.221	-6.142	23.166	1.00	0.00
ATOM 1443	HA	PRO A	98	132.859	-7.746	22.261	1.00	0.00
ATOM 1444	1HB	PRO A	98	131.767	-8.720	24.548	1.00	0.00
ATOM 1445	2HB	PRO A	98	132.560	-7.142	24.459	1.00	0.00
ATOM 1446	1HG	PRO A	98	129.641	-7.804	24.375	1.00	0.00
ATOM 1447	2HG	PRO A	98	130.469	-6.504	25.254	1.00	0.00
ATOM 1448	1HD	PRO A	98	129.171	-6.080	22.917	1.00	0.00
ATOM 1449	2HD	PRO A	98	130.617	-5.162	23.386	1.00	0.00
ATOM 1450	N	SER A	99	132.218	-10.012	21.495	1.00	0.00
ATOM 1451	CA	SER A	99	131.868	-11.344	21.017	1.00	0.00
ATOM 1452	C	SER A	99	132.957	-12.352	21.371	1.00	0.00

ATOM 1453	O	SER A	99	132.687	-13.383	21.987	1.00	0.00
ATOM 1454	CB	SER A	99	131.648	-11.324	19.503	1.00	0.00
ATOM 1455	OG	SER A	99	132.444	-10.328	18.884	1.00	0.00
ATOM 1456	H	SER A	99	133.126	-9.673	21.346	1.00	0.00
ATOM 1457	HA	SER A	99	130.950	-11.639	21.502	1.00	0.00
ATOM 1458	1HB	SER A	99	131.914	-12.287	19.091	1.00	0.00
ATOM 1459	2HB	SER A	99	130.608	-11.119	19.296	1.00	0.00
ATOM 1460	HG	SER A	99	131.881	-9.611	18.582	1.00	0.00
ATOM 1461	N	GLY A	100	134.190	-12.047	20.978	1.00	0.00
ATOM 1462	CA	GLY A	100	135.300	-12.936	21.263	1.00	0.00
ATOM 1463	C	GLY A	100	135.839	-12.759	22.670	1.00	0.00
ATOM 1464	O	GLY A	100	135.168	-12.182	23.525	1.00	0.00
ATOM 1465	H	GLY A	100	134.346	-11.212	20.491	1.00	0.00
ATOM 1466	1HA	GLY A	100	134.970	-13.957	21.141	1.00	0.00
ATOM 1467	2HA	GLY A	100	136.095	-12.740	20.557	1.00	0.00
ATOM 1468	N	PRO A	101	137.062	-13.248	22.942	1.00	0.00
ATOM 1469	CA	PRO A	101	137.680	-13.133	24.267	1.00	0.00
ATOM 1470	C	PRO A	101	138.074	-11.697	24.600	1.00	0.00
ATOM 1471	O	PRO A	101	137.812	-11.210	25.698	1.00	0.00
ATOM 1472	CB	PRO A	101	138.926	-14.015	24.156	1.00	0.00
ATOM 1473	CG	PRO A	101	139.252	-14.029	22.703	1.00	0.00
ATOM 1474	CD	PRO A	101	137.934	-13.949	21.982	1.00	0.00
ATOM 1475	HA	PRO A	101	137.032	-13.516	25.041	1.00	0.00
ATOM 1476	1HB	PRO A	101	139.728	-13.586	24.738	1.00	0.00
ATOM 1477	2HB	PRO A	101	138.701	-15.007	24.519	1.00	0.00
ATOM 1478	1HG	PRO A	101	139.867	-13.176	22.456	1.00	0.00
ATOM 1479	2HG	PRO A	101	139.762	-14.947	22.450	1.00	0.00
ATOM 1480	1HD	PRO A	101	138.037	-13.382	21.069	1.00	0.00
ATOM 1481	2HD	PRO A	101	137.558	-14.940	21.773	1.00	0.00

ATOM 1482	N	SER A 102	138.704	-11.024	23.642	1.00	0.00
ATOM 1483	CA	SER A 102	139.133	-9.644	23.833	1.00	0.00
ATOM 1484	C	SER A 102	139.033	-8.858	22.530	1.00	0.00
ATOM 1485	O	SER A 102	140.038	-8.608	21.865	1.00	0.00
ATOM 1486	CB	SER A 102	140.569	-9.602	24.359	1.00	0.00
ATOM 1487	OG	SER A 102	140.652	-10.160	25.659	1.00	0.00
ATOM 1488	H	SER A 102	138.885	-11.467	22.786	1.00	0.00
ATOM 1489	HA	SER A 102	138.479	-9.192	24.564	1.00	0.00
ATOM 1490	1HB	SER A 102	141.209	-10.168	23.699	1.00	0.00
ATOM 1491	2HB	SER A 102	140.907	-8.577	24.398	1.00	0.00
ATOM 1492	HG	SER A 102	140.083	-9.667	26.256	1.00	0.00
ATOM 1493	N	SER A 103	137.813	-8.469	22.171	1.00	0.00
ATOM 1494	CA	SER A 103	137.575	-7.710	20.947	1.00	0.00
ATOM 1495	C	SER A 103	137.853	-8.562	19.712	1.00	0.00
ATOM 1496	O	SER A 103	136.932	-8.955	18.997	1.00	0.00
ATOM 1497	CB	SER A 103	138.444	-6.450	20.921	1.00	0.00
ATOM 1498	OG	SER A 103	137.703	-5.328	20.472	1.00	0.00
ATOM 1499	H	SER A 103	137.051	-8.699	22.744	1.00	0.00
ATOM 1500	HA	SER A 103	136.535	-7.417	20.938	1.00	0.00
ATOM 1501	1HB	SER A 103	138.809	-6.246	21.917	1.00	0.00
ATOM 1502	2HB	SER A 103	139.280	-6.603	20.256	1.00	0.00
ATOM 1503	HG	SER A 103	137.240	-5.554	19.662	1.00	0.00
ATOM 1504	N	GLY A 104	139.130	-8.843	19.468	1.00	0.00
ATOM 1505	CA	GLY A 104	139.505	-9.647	18.319	1.00	0.00
ATOM 1506	C	GLY A 104	140.109	-8.818	17.205	1.00	0.00
ATOM 1507	O	GLY A 104	141.142	-8.158	17.448	1.00	0.00
ATOM 1508	OXT	GLY A 104	139.552	-8.828	16.087	1.00	0.00
ATOM 1509	H	GLY A 104	139.822	-8.504	20.073	1.00	0.00
ATOM 1510	1HA	GLY A 104	140.225	-10.388	18.633	1.00	0.00

ATOM 1511 2HA GLY A 104 138.626 -10.150 17.943 1.00 0.00  
TER 1512 GLY A 104  
ENDMDL

## 【 0 1 0 0 】

## 立体構造座標表 3

ATOM 1	N	GLY A	1	125.212	27.334	-8.433	1.00	0.00
ATOM 2	CA	GLY A	1	126.127	26.226	-8.041	1.00	0.00
ATOM 3	C	GLY A	1	126.734	25.523	-9.238	1.00	0.00
ATOM 4	O	GLY A	1	126.538	24.322	-9.426	1.00	0.00
ATOM 5	1H	GLY A	1	125.466	27.688	-9.377	1.00	0.00
ATOM 6	2H	GLY A	1	125.283	28.114	-7.751	1.00	0.00
ATOM 7	3H	GLY A	1	124.229	26.994	-8.455	1.00	0.00
ATOM 8	1HA	GLY A	1	126.923	26.630	-7.432	1.00	0.00
ATOM 9	2HA	GLY A	1	125.572	25.506	-7.457	1.00	0.00
ATOM 10	N	SER A	2	127.472	26.272	-10.049	1.00	0.00
ATOM 11	CA	SER A	2	128.110	25.713	-11.236	1.00	0.00
ATOM 12	C	SER A	2	129.203	24.723	-10.851	1.00	0.00
ATOM 13	O	SER A	2	129.120	23.536	-11.169	1.00	0.00
ATOM 14	CB	SER A	2	128.700	26.831	-12.098	1.00	0.00
ATOM 15	OG	SER A	2	127.762	27.284	-13.059	1.00	0.00
ATOM 16	H	SER A	2	127.592	27.223	-9.846	1.00	0.00
ATOM 17	HA	SER A	2	127.354	25.193	-11.805	1.00	0.00
ATOM 18	1HB	SER A	2	128.978	27.662	-11.466	1.00	0.00
ATOM 19	2HB	SER A	2	129.575	26.461	-12.613	1.00	0.00
ATOM 20	HG	SER A	2	127.770	28.243	-13.087	1.00	0.00
ATOM 21	N	SER A	3	130.228	25.217	-10.164	1.00	0.00
ATOM 22	CA	SER A	3	131.338	24.374	-9.734	1.00	0.00
ATOM 23	C	SER A	3	130.855	23.274	-8.795	1.00	0.00

ATOM 24	O	SER A	3	130.082	23.528	-7.871	1.00	0.00
ATOM 25	CB	SER A	3	132.408	25.220	-9.040	1.00	0.00
ATOM 26	OG	SER A	3	132.727	26.369	-9.806	1.00	0.00
ATOM 27	H	SER A	3	130.237	26.171	-9.939	1.00	0.00
ATOM 28	HA	SER A	3	131.767	23.918	-10.613	1.00	0.00
ATOM 29	1HB	SER A	3	132.043	25.537	-8.075	1.00	0.00
ATOM 30	2HB	SER A	3	133.302	24.629	-8.910	1.00	0.00
ATOM 31	HG	SER A	3	132.091	27.063	-9.621	1.00	0.00
ATOM 32	N	GLY A	4	131.315	22.051	-9.038	1.00	0.00
ATOM 33	CA	GLY A	4	130.919	20.931	-8.206	1.00	0.00
ATOM 34	C	GLY A	4	130.532	19.711	-9.020	1.00	0.00
ATOM 35	O	GLY A	4	129.678	19.791	-9.902	1.00	0.00
ATOM 36	H	GLY A	4	131.929	21.908	-9.789	1.00	0.00
ATOM 37	1HA	GLY A	4	131.742	20.670	-7.557	1.00	0.00
ATOM 38	2HA	GLY A	4	130.076	21.227	-7.599	1.00	0.00
ATOM 39	N	SER A	5	131.165	18.580	-8.724	1.00	0.00
ATOM 40	CA	SER A	5	130.883	17.339	-9.436	1.00	0.00
ATOM 41	C	SER A	5	129.775	16.553	-8.741	1.00	0.00
ATOM 42	O	SER A	5	129.529	16.730	-7.548	1.00	0.00
ATOM 43	CB	SER A	5	132.147	16.483	-9.532	1.00	0.00
ATOM 44	OG	SER A	5	132.417	15.830	-8.304	1.00	0.00
ATOM 45	H	SER A	5	131.837	18.580	-8.011	1.00	0.00
ATOM 46	HA	SER A	5	130.555	17.595	-10.432	1.00	0.00
ATOM 47	1HB	SER A	5	132.015	15.736	-10.300	1.00	0.00
ATOM 48	2HB	SER A	5	132.987	17.113	-9.784	1.00	0.00
ATOM 49	HG	SER A	5	132.762	14.951	-8.477	1.00	0.00
ATOM 50	N	SER A	6	129.109	15.685	-9.496	1.00	0.00
ATOM 51	CA	SER A	6	128.028	14.872	-8.952	1.00	0.00
ATOM 52	C	SER A	6	128.579	13.712	-8.129	1.00	0.00



ATOM 53	O	SER A	6	129.231	12.814	-8.662	1.00	0.00
ATOM 54	CB	SER A	6	127.146	14.337	-10.081	1.00	0.00
ATOM 55	OG	SER A	6	126.755	15.378	-10.960	1.00	0.00
ATOM 56	H	SER A	6	129.352	15.588	-10.440	1.00	0.00
ATOM 57	HA	SER A	6	127.431	15.502	-8.309	1.00	0.00
ATOM 58	1HB	SER A	6	127.695	13.597	-10.644	1.00	0.00
ATOM 59	2HB	SER A	6	126.260	13.885	-9.661	1.00	0.00
ATOM 60	HG	SER A	6	127.535	15.778	-11.351	1.00	0.00
ATOM 61	N	GLY A	7	128.313	13.737	-6.827	1.00	0.00
ATOM 62	CA	GLY A	7	128.790	12.683	-5.952	1.00	0.00
ATOM 63	C	GLY A	7	127.664	11.816	-5.421	1.00	0.00
ATOM 64	O	GLY A	7	127.124	12.079	-4.346	1.00	0.00
ATOM 65	H	GLY A	7	127.788	14.478	-6.458	1.00	0.00
ATOM 66	1HA	GLY A	7	129.481	12.060	-6.499	1.00	0.00
ATOM 67	2HA	GLY A	7	129.308	13.130	-5.116	1.00	0.00
ATOM 68	N	LEU A	8	127.309	10.783	-6.177	1.00	0.00
ATOM 69	CA	LEU A	8	126.240	9.875	-5.777	1.00	0.00
ATOM 70	C	LEU A	8	126.566	9.201	-4.447	1.00	0.00
ATOM 71	O	LEU A	8	125.679	8.948	-3.633	1.00	0.00
ATOM 72	CB	LEU A	8	126.012	8.815	-6.857	1.00	0.00
ATOM 73	CG	LEU A	8	125.799	9.364	-8.267	1.00	0.00
ATOM 74	CD1	LEU A	8	126.357	8.401	-9.305	1.00	0.00
ATOM 75	CD2	LEU A	8	124.323	9.626	-8.520	1.00	0.00
ATOM 76	H	LEU A	8	127.778	10.626	-7.023	1.00	0.00
ATOM 77	HA	LEU A	8	125.338	10.456	-5.659	1.00	0.00
ATOM 78	1HB	LEU A	8	126.869	8.158	-6.872	1.00	0.00
ATOM 79	2HB	LEU A	8	125.141	8.237	-6.585	1.00	0.00
ATOM 80	HG	LEU A	8	126.328	10.302	-8.366	1.00	0.00
ATOM 81	1HD1	LEU A	8	125.688	7.560	-9.412	1.00	0.00

ATOM 82	2HD1	LEU A	8	127.328	8.051	-8.985	1.00	0.00
ATOM 83	3HD1	LEU A	8	126.453	8.909	-10.253	1.00	0.00
ATOM 84	1HD2	LEU A	8	124.119	9.548	-9.578	1.00	0.00
ATOM 85	2HD2	LEU A	8	124.069	10.618	-8.177	1.00	0.00
ATOM 86	3HD2	LEU A	8	123.731	8.897	-7.986	1.00	0.00
ATOM 87	N	ALA A	9	127.846	8.913	-4.236	1.00	0.00
ATOM 88	CA	ALA A	9	128.291	8.269	-3.007	1.00	0.00
ATOM 89	C	ALA A	9	129.810	8.310	-2.884	1.00	0.00
ATOM 90	O	ALA A	9	130.425	7.393	-2.339	1.00	0.00
ATOM 91	CB	ALA A	9	127.794	6.833	-2.955	1.00	0.00
ATOM 92	H	ALA A	9	128.507	9.141	-4.924	1.00	0.00
ATOM 93	HA	ALA A	9	127.858	8.805	-2.175	1.00	0.00
ATOM 94	1HB	ALA A	9	128.506	6.225	-2.415	1.00	0.00
ATOM 95	2HB	ALA A	9	127.686	6.452	-3.960	1.00	0.00
ATOM 96	3HB	ALA A	9	126.839	6.800	-2.452	1.00	0.00
ATOM 97	N	MET A	10	130.412	9.381	-3.394	1.00	0.00
ATOM 98	CA	MET A	10	131.861	9.542	-3.341	1.00	0.00
ATOM 99	C	MET A	10	132.281	10.879	-3.949	1.00	0.00
ATOM 100	O	MET A	10	132.849	10.924	-5.041	1.00	0.00
ATOM 101	CB	MET A	10	132.550	8.392	-4.080	1.00	0.00
ATOM 102	CG	MET A	10	131.913	8.058	-5.419	1.00	0.00
ATOM 103	SD	MET A	10	132.616	6.579	-6.173	1.00	0.00
ATOM 104	CE	MET A	10	132.892	7.152	-7.847	1.00	0.00
ATOM 105	H	MET A	10	129.868	10.079	-3.816	1.00	0.00
ATOM 106	HA	MET A	10	132.159	9.522	-2.304	1.00	0.00
ATOM 107	1HB	MET A	10	133.582	8.658	-4.253	1.00	0.00
ATOM 108	2HB	MET A	10	132.515	7.509	-3.459	1.00	0.00
ATOM 109	1HG	MET A	10	130.855	7.900	-5.270	1.00	0.00
ATOM 110	2HG	MET A	10	132.060	8.892	-6.089	1.00	0.00

ATOM 111	1HE	MET A	10	133.578	7.985	-7.834	1.00	0.00
ATOM 112	2HE	MET A	10	131.954	7.464	-8.281	1.00	0.00
ATOM 113	3HE	MET A	10	133.312	6.350	-8.437	1.00	0.00
ATOM 114	N	PRO A	11	132.008	11.991	-3.245	1.00	0.00
ATOM 115	CA	PRO A	11	132.361	13.332	-3.719	1.00	0.00
ATOM 116	C	PRO A	11	133.857	13.483	-3.993	1.00	0.00
ATOM 117	O	PRO A	11	134.251	14.000	-5.038	1.00	0.00
ATOM 118	CB	PRO A	11	131.929	14.253	-2.573	1.00	0.00
ATOM 119	CG	PRO A	11	130.928	13.466	-1.798	1.00	0.00
ATOM 120	CD	PRO A	11	131.334	12.027	-1.935	1.00	0.00
ATOM 121	HA	PRO A	11	131.811	13.588	-4.613	1.00	0.00
ATOM 122	1HB	PRO A	11	132.788	14.507	-1.969	1.00	0.00
ATOM 123	2HB	PRO A	11	131.492	15.154	-2.979	1.00	0.00
ATOM 124	1HG	PRO A	11	130.950	13.764	-0.761	1.00	0.00
ATOM 125	2HG	PRO A	11	129.942	13.618	-2.212	1.00	0.00
ATOM 126	1HD	PRO A	11	132.014	11.749	-1.144	1.00	0.00
ATOM 127	2HD	PRO A	11	130.465	11.386	-1.931	1.00	0.00
ATOM 128	N	PRO A	12	134.718	13.035	-3.058	1.00	0.00
ATOM 129	CA	PRO A	12	136.168	13.131	-3.217	1.00	0.00
ATOM 130	C	PRO A	12	136.731	12.015	-4.090	1.00	0.00
ATOM 131	O	PRO A	12	137.651	12.234	-4.879	1.00	0.00
ATOM 132	CB	PRO A	12	136.677	12.999	-1.785	1.00	0.00
ATOM 133	CG	PRO A	12	135.676	12.124	-1.112	1.00	0.00
ATOM 134	CD	PRO A	12	134.349	12.402	-1.774	1.00	0.00
ATOM 135	HA	PRO A	12	136.461	14.089	-3.621	1.00	0.00
ATOM 136	1HB	PRO A	12	137.659	12.549	-1.788	1.00	0.00
ATOM 137	2HB	PRO A	12	136.720	13.974	-1.323	1.00	0.00
ATOM 138	1HG	PRO A	12	135.949	11.087	-1.246	1.00	0.00
ATOM 139	2HG	PRO A	12	135.627	12.365	-0.061	1.00	0.00

ATOM 140	1HD	PRO A	12	133.815	11.479	-1.940	1.00	0.00
ATOM 141	2HD	PRO A	12	133.761	13.074	-1.167	1.00	0.00
ATOM 142	N	GLY A	13	136.173	10.818	-3.944	1.00	0.00
ATOM 143	CA	GLY A	13	136.632	9.684	-4.726	1.00	0.00
ATOM 144	C	GLY A	13	136.975	8.487	-3.862	1.00	0.00
ATOM 145	O	GLY A	13	137.982	7.818	-4.091	1.00	0.00
ATOM 146	H	GLY A	13	135.443	10.703	-3.300	1.00	0.00
ATOM 147	1HA	GLY A	13	135.855	9.402	-5.421	1.00	0.00
ATOM 148	2HA	GLY A	13	137.510	9.976	-5.283	1.00	0.00
ATOM 149	N	ASN A	14	136.136	8.216	-2.867	1.00	0.00
ATOM 150	CA	ASN A	14	136.356	7.092	-1.966	1.00	0.00
ATOM 151	C	ASN A	14	135.123	6.196	-1.901	1.00	0.00
ATOM 152	O	ASN A	14	133.991	6.673	-1.989	1.00	0.00
ATOM 153	CB	ASN A	14	136.708	7.595	-0.565	1.00	0.00
ATOM 154	CG	ASN A	14	138.013	8.366	-0.540	1.00	0.00
ATOM 155	OD1	ASN A	14	138.027	9.590	-0.676	1.00	0.00
ATOM 156	ND2	ASN A	14	139.119	7.653	-0.365	1.00	0.00
ATOM 157	H	ASN A	14	135.350	8.787	-2.737	1.00	0.00
ATOM 158	HA	ASN A	14	137.185	6.515	-2.350	1.00	0.00
ATOM 159	1HB	ASN A	14	135.920	8.245	-0.214	1.00	0.00
ATOM 160	2HB	ASN A	14	136.797	6.751	0.102	1.00	0.00
ATOM 161	1HD2	ASN A	14	139.032	6.682	-0.263	1.00	0.00
ATOM 162	2HD2	ASN A	14	139.977	8.127	-0.344	1.00	0.00
ATOM 163	N	SER A	15	135.349	4.896	-1.747	1.00	0.00
ATOM 164	CA	SER A	15	134.257	3.933	-1.670	1.00	0.00
ATOM 165	C	SER A	15	133.351	4.234	-0.480	1.00	0.00
ATOM 166	O	SER A	15	132.125	4.183	-0.592	1.00	0.00
ATOM 167	CB	SER A	15	134.808	2.511	-1.559	1.00	0.00
ATOM 168	OG	SER A	15	133.762	1.569	-1.395	1.00	0.00

ATOM 169	H	SER A	15	136.274	4.576	-1.683	1.00	0.00
ATOM 170	HA	SER A	15	133.678	4.015	-2.578	1.00	0.00
ATOM 171	1HB	SER A	15	135.357	2.269	-2.456	1.00	0.00
ATOM 172	2HB	SER A	15	135.469	2.450	-0.705	1.00	0.00
ATOM 173	HG	SER A	15	133.843	0.882	-2.061	1.00	0.00
ATOM 174	N	HIS A	16	133.961	4.548	0.657	1.00	0.00
ATOM 175	CA	HIS A	16	133.209	4.857	1.868	1.00	0.00
ATOM 176	C	HIS A	16	134.054	5.675	2.839	1.00	0.00
ATOM 177	O	HIS A	16	133.627	6.726	3.317	1.00	0.00
ATOM 178	CB	HIS A	16	132.738	3.568	2.544	1.00	0.00
ATOM 179	CG	HIS A	16	131.347	3.167	2.163	1.00	0.00
ATOM 180	ND1	HIS A	16	130.235	3.926	2.465	1.00	0.00
ATOM 181	CD2	HIS A	16	130.889	2.079	1.500	1.00	0.00
ATOM 182	CE1	HIS A	16	129.154	3.321	2.004	1.00	0.00
ATOM 183	NE2	HIS A	16	129.523	2.200	1.414	1.00	0.00
ATOM 184	H	HIS A	16	134.940	4.572	0.684	1.00	0.00
ATOM 185	HA	HIS A	16	132.346	5.439	1.582	1.00	0.00
ATOM 186	1HB	HIS A	16	133.402	2.762	2.269	1.00	0.00
ATOM 187	2HB	HIS A	16	132.765	3.700	3.616	1.00	0.00
ATOM 188	HD1	HIS A	16	130.238	4.780	2.945	1.00	0.00
ATOM 189	HD2	HIS A	16	131.487	1.267	1.110	1.00	0.00
ATOM 190	HE1	HIS A	16	128.141	3.684	2.094	1.00	0.00
ATOM 191	HE2	HIS A	16	128.912	1.519	1.063	1.00	0.00
ATOM 192	N	GLY A	17	135.256	5.187	3.127	1.00	0.00
ATOM 193	CA	GLY A	17	136.143	5.884	4.039	1.00	0.00
ATOM 194	C	GLY A	17	137.538	5.294	4.059	1.00	0.00
ATOM 195	O	GLY A	17	138.056	4.942	5.119	1.00	0.00
ATOM 196	H	GLY A	17	135.544	4.345	2.716	1.00	0.00
ATOM 197	1HA	GLY A	17	136.206	6.921	3.740	1.00	0.00

ATOM 198	2HA	GLY A	17	135.728	5.835	5.036	1.00	0.00
ATOM 199	N	LEU A	18	138.149	5.184	2.883	1.00	0.00
ATOM 200	CA	LEU A	18	139.492	4.631	2.770	1.00	0.00
ATOM 201	C	LEU A	18	140.541	5.657	3.188	1.00	0.00
ATOM 202	O	LEU A	18	140.936	6.512	2.396	1.00	0.00
ATOM 203	CB	LEU A	18	139.758	4.170	1.335	1.00	0.00
ATOM 204	CG	LEU A	18	138.859	3.033	0.845	1.00	0.00
ATOM 205	CD1	LEU A	18	138.767	3.043	-0.673	1.00	0.00
ATOM 206	CD2	LEU A	18	139.378	1.691	1.341	1.00	0.00
ATOM 207	H	LEU A	18	137.684	5.482	2.074	1.00	0.00
ATOM 208	HA	LEU A	18	139.558	3.778	3.429	1.00	0.00
ATOM 209	1HB	LEU A	18	139.624	5.016	0.677	1.00	0.00
ATOM 210	2HB	LEU A	18	140.784	3.841	1.268	1.00	0.00
ATOM 211	HG	LEU A	18	137.863	3.174	1.239	1.00	0.00
ATOM 212	1HD1	LEU A	18	139.705	3.382	-1.088	1.00	0.00
ATOM 213	2HD1	LEU A	18	137.975	3.707	-0.982	1.00	0.00
ATOM 214	3HD1	LEU A	18	138.559	2.043	-1.028	1.00	0.00
ATOM 215	1HD2	LEU A	18	139.928	1.837	2.260	1.00	0.00
ATOM 216	2HD2	LEU A	18	140.029	1.260	0.596	1.00	0.00
ATOM 217	3HD2	LEU A	18	138.546	1.028	1.521	1.00	0.00
ATOM 218	N	GLU A	19	140.986	5.564	4.436	1.00	0.00
ATOM 219	CA	GLU A	19	141.989	6.485	4.959	1.00	0.00
ATOM 220	C	GLU A	19	143.037	5.739	5.779	1.00	0.00
ATOM 221	O	GLU A	19	142.979	4.517	5.913	1.00	0.00
ATOM 222	CB	GLU A	19	141.325	7.562	5.819	1.00	0.00
ATOM 223	CG	GLU A	19	140.463	7.001	6.937	1.00	0.00
ATOM 224	CD	GLU A	19	139.402	7.979	7.402	1.00	0.00
ATOM 225	OE1	GLU A	19	139.434	8.369	8.589	1.00	0.00
ATOM 226	OE2	GLU A	19	138.541	8.356	6.581	1.00	0.00

ATOM 227	H	GLU A	19	140.633	4.861	5.019	1.00	0.00
ATOM 228	HA	GLU A	19	142.476	6.957	4.119	1.00	0.00
ATOM 229	1HB	GLU A	19	142.094	8.179	6.260	1.00	0.00
ATOM 230	2HB	GLU A	19	140.701	8.176	5.186	1.00	0.00
ATOM 231	1HG	GLU A	19	139.974	6.106	6.584	1.00	0.00
ATOM 232	2HG	GLU A	19	141.098	6.756	7.776	1.00	0.00
ATOM 233	N	VAL A	20	143.994	6.483	6.324	1.00	0.00
ATOM 234	CA	VAL A	20	145.055	5.891	7.131	1.00	0.00
ATOM 235	C	VAL A	20	144.481	5.136	8.326	1.00	0.00
ATOM 236	O	VAL A	20	143.631	5.653	9.050	1.00	0.00
ATOM 237	CB	VAL A	20	146.037	6.964	7.639	1.00	0.00
ATOM 238	CG1	VAL A	20	147.209	6.320	8.365	1.00	0.00
ATOM 239	CG2	VAL A	20	146.525	7.828	6.485	1.00	0.00
ATOM 240	H	VAL A	20	143.987	7.452	6.181	1.00	0.00
ATOM 241	HA	VAL A	20	145.601	5.198	6.508	1.00	0.00
ATOM 242	HB	VAL A	20	145.515	7.600	8.339	1.00	0.00
ATOM 243	1HG1	VAL A	20	148.077	6.958	8.284	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.425	5.361	7.919	1.00	0.00
ATOM 245	3HG1	VAL A	20	146.957	6.185	9.406	1.00	0.00
ATOM 246	1HG2	VAL A	20	145.737	8.499	6.179	1.00	0.00
ATOM 247	2HG2	VAL A	20	146.802	7.196	5.655	1.00	0.00
ATOM 248	3HG2	VAL A	20	147.384	8.402	6.803	1.00	0.00
ATOM 249	N	GLY A	21	144.950	3.908	8.525	1.00	0.00
ATOM 250	CA	GLY A	21	144.472	3.102	9.631	1.00	0.00
ATOM 251	C	GLY A	21	143.364	2.152	9.221	1.00	0.00
ATOM 252	O	GLY A	21	143.223	1.069	9.789	1.00	0.00
ATOM 253	H	GLY A	21	145.627	3.547	7.913	1.00	0.00
ATOM 254	1HA	GLY A	21	145.296	2.526	10.025	1.00	0.00
ATOM 255	2HA	GLY A	21	144.102	3.757	10.406	1.00	0.00

ATOM 256	N	SER A	22	142.573	2.559	8.232	1.00	0.00
ATOM 257	CA	SER A	22	141.471	1.736	7.747	1.00	0.00
ATOM 258	C	SER A	22	141.972	0.673	6.775	1.00	0.00
ATOM 259	O	SER A	22	142.811	0.948	5.916	1.00	0.00
ATOM 260	CB	SER A	22	140.417	2.611	7.066	1.00	0.00
ATOM 261	OG	SER A	22	139.648	3.320	8.022	1.00	0.00
ATOM 262	H	SER A	22	142.735	3.432	7.820	1.00	0.00
ATOM 263	HA	SER A	22	141.024	1.246	8.598	1.00	0.00
ATOM 264	1HB	SER A	22	140.907	3.322	6.417	1.00	0.00
ATOM 265	2HB	SER A	22	139.756	1.986	6.482	1.00	0.00
ATOM 266	HG	SER A	22	140.233	3.756	8.644	1.00	0.00
ATOM 267	N	LEU A	23	141.454	-0.542	6.915	1.00	0.00
ATOM 268	CA	LEU A	23	141.848	-1.647	6.049	1.00	0.00
ATOM 269	C	LEU A	23	141.271	-1.474	4.649	1.00	0.00
ATOM 270	O	LEU A	23	140.212	-0.873	4.474	1.00	0.00
ATOM 271	CB	LEU A	23	141.386	-2.979	6.644	1.00	0.00
ATOM 272	CG	LEU A	23	142.034	-3.354	7.977	1.00	0.00
ATOM 273	CD1	LEU A	23	141.095	-4.216	8.805	1.00	0.00
ATOM 274	CD2	LEU A	23	143.354	-4.074	7.743	1.00	0.00
ATOM 275	H	LEU A	23	140.789	-0.700	7.620	1.00	0.00
ATOM 276	HA	LEU A	23	142.926	-1.648	5.984	1.00	0.00
ATOM 277	1HB	LEU A	23	140.316	-2.931	6.788	1.00	0.00
ATOM 278	2HB	LEU A	23	141.602	-3.761	5.932	1.00	0.00
ATOM 279	HG	LEU A	23	142.239	-2.452	8.537	1.00	0.00
ATOM 280	1HD1	LEU A	23	140.088	-3.834	8.720	1.00	0.00
ATOM 281	2HD1	LEU A	23	141.402	-4.193	9.840	1.00	0.00
ATOM 282	3HD1	LEU A	23	141.125	-5.232	8.442	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.989	-3.950	8.607	1.00	0.00
ATOM 284	2HD2	LEU A	23	143.843	-3.657	6.874	1.00	0.00



ATOM 285	3HD2	LEU A	23	143.167	-5.125	7.581	1.00	0.00
ATOM 286	N	ALA A	24	141.975	-2.007	3.654	1.00	0.00
ATOM 287	CA	ALA A	24	141.532	-1.911	2.269	1.00	0.00
ATOM 288	C	ALA A	24	142.129	-3.030	1.423	1.00	0.00
ATOM 289	O	ALA A	24	142.995	-3.774	1.883	1.00	0.00
ATOM 290	CB	ALA A	24	141.902	-0.554	1.689	1.00	0.00
ATOM 291	H	ALA A	24	142.811	-2.474	3.858	1.00	0.00
ATOM 292	HA	ALA A	24	140.455	-1.999	2.256	1.00	0.00
ATOM 293	1HB	ALA A	24	142.966	-0.395	1.797	1.00	0.00
ATOM 294	2HB	ALA A	24	141.367	0.221	2.216	1.00	0.00
ATOM 295	3HB	ALA A	24	141.638	-0.525	0.642	1.00	0.00
ATOM 296	N	GLU A	25	141.660	-3.144	0.185	1.00	0.00
ATOM 297	CA	GLU A	25	142.147	-4.174	-0.726	1.00	0.00
ATOM 298	C	GLU A	25	142.482	-3.580	-2.090	1.00	0.00
ATOM 299	O	GLU A	25	141.969	-2.524	-2.461	1.00	0.00
ATOM 300	CB	GLU A	25	141.105	-5.282	-0.880	1.00	0.00
ATOM 301	CG	GLU A	25	141.622	-6.505	-1.622	1.00	0.00
ATOM 302	CD	GLU A	25	140.539	-7.537	-1.869	1.00	0.00
ATOM 303	OE1	GLU A	25	139.448	-7.152	-2.336	1.00	0.00
ATOM 304	OE2	GLU A	25	140.785	-8.732	-1.597	1.00	0.00
ATOM 305	H	GLU A	25	140.969	-2.522	-0.124	1.00	0.00
ATOM 306	HA	GLU A	25	143.047	-4.594	-0.299	1.00	0.00
ATOM 307	1HB	GLU A	25	140.778	-5.594	0.100	1.00	0.00
ATOM 308	2HB	GLU A	25	140.258	-4.890	-1.424	1.00	0.00
ATOM 309	1HG	GLU A	25	142.022	-6.190	-2.575	1.00	0.00
ATOM 310	2HG	GLU A	25	142.407	-6.960	-1.035	1.00	0.00
ATOM 311	N	VAL A	26	143.346	-4.266	-2.833	1.00	0.00
ATOM 312	CA	VAL A	26	143.749	-3.806	-4.157	1.00	0.00
ATOM 313	C	VAL A	26	143.397	-4.834	-5.227	1.00	0.00

ATOM 314	O	VAL A	26	143.403	-6.038	-4.971	1.00	0.00
ATOM 315	CB	VAL A	26	145.261	-3.520	-4.216	1.00	0.00
ATOM 316	CG1	VAL A	26	145.630	-2.857	-5.534	1.00	0.00
ATOM 317	CG2	VAL A	26	145.688	-2.657	-3.038	1.00	0.00
ATOM 318	H	VAL A	26	143.721	-5.100	-2.482	1.00	0.00
ATOM 319	HA	VAL A	26	143.221	-2.886	-4.366	1.00	0.00
ATOM 320	HB	VAL A	26	145.788	-4.461	-4.153	1.00	0.00
ATOM 321	1HG1	VAL A	26	144.767	-2.343	-5.931	1.00	0.00
ATOM 322	2HG1	VAL A	26	145.957	-3.609	-6.236	1.00	0.00
ATOM 323	3HG1	VAL A	26	146.427	-2.146	-5.370	1.00	0.00
ATOM 324	1HG2	VAL A	26	145.118	-1.739	-3.039	1.00	0.00
ATOM 325	2HG2	VAL A	26	146.740	-2.427	-3.122	1.00	0.00
ATOM 326	3HG2	VAL A	26	145.508	-3.190	-2.117	1.00	0.00
ATOM 327	N	LYS A	27	143.090	-4.350	-6.425	1.00	0.00
ATOM 328	CA	LYS A	27	142.735	-5.226	-7.536	1.00	0.00
ATOM 329	C	LYS A	27	143.971	-5.609	-8.343	1.00	0.00
ATOM 330	O	LYS A	27	144.276	-4.991	-9.362	1.00	0.00
ATOM 331	CB	LYS A	27	141.708	-4.544	-8.443	1.00	0.00
ATOM 332	CG	LYS A	27	140.274	-4.963	-8.160	1.00	0.00
ATOM 333	CD	LYS A	27	139.289	-4.199	-9.032	1.00	0.00
ATOM 334	CE	LYS A	27	138.175	-5.101	-9.536	1.00	0.00
ATOM 335	NZ	LYS A	27	138.653	-6.038	-10.591	1.00	0.00
ATOM 336	H	LYS A	27	143.103	-3.380	-6.567	1.00	0.00
ATOM 337	HA	LYS A	27	142.297	-6.123	-7.123	1.00	0.00
ATOM 338	1HB	LYS A	27	141.781	-3.475	-8.309	1.00	0.00
ATOM 339	2HB	LYS A	27	141.934	-4.786	-9.470	1.00	0.00
ATOM 340	1HG	LYS A	27	140.171	-6.019	-8.360	1.00	0.00
ATOM 341	2HG	LYS A	27	140.050	-4.766	-7.122	1.00	0.00
ATOM 342	1HD	LYS A	27	138.855	-3.399	-8.451	1.00	0.00

ATOM 343	2HD	LYS A	27	139.818	-3.785	-9.879	1.00	0.00
ATOM 344	1HE	LYS A	27	137.790	-5.675	-8.707	1.00	0.00
ATOM 345	2HE	LYS A	27	137.388	-4.486	-9.945	1.00	0.00
ATOM 346	1HZ	LYS A	27	139.312	-5.550	-11.231	1.00	0.00
ATOM 347	2HZ	LYS A	27	137.849	-6.394	-11.145	1.00	0.00
ATOM 348	3HZ	LYS A	27	139.145	-6.845	-10.156	1.00	0.00
ATOM 349	N	GLU A	28	144.679	-6.635	-7.880	1.00	0.00
ATOM 350	CA	GLU A	28	145.883	-7.101	-8.559	1.00	0.00
ATOM 351	C	GLU A	28	145.850	-8.615	-8.743	1.00	0.00
ATOM 352	O	GLU A	28	144.881	-9.276	-8.371	1.00	0.00
ATOM 353	CB	GLU A	28	147.129	-6.694	-7.770	1.00	0.00
ATOM 354	CG	GLU A	28	148.209	-6.054	-8.627	1.00	0.00
ATOM 355	CD	GLU A	28	147.852	-4.643	-9.054	1.00	0.00
ATOM 356	OE1	GLU A	28	147.828	-4.382	-10.276	1.00	0.00
ATOM 357	OE2	GLU A	28	147.598	-3.801	-8.168	1.00	0.00
ATOM 358	H	GLU A	28	144.386	-7.089	-7.063	1.00	0.00
ATOM 359	HA	GLU A	28	145.915	-6.634	-9.532	1.00	0.00
ATOM 360	1HB	GLU A	28	146.842	-5.989	-7.005	1.00	0.00
ATOM 361	2HB	GLU A	28	147.548	-7.573	-7.299	1.00	0.00
ATOM 362	1HG	GLU A	28	149.127	-6.021	-8.060	1.00	0.00
ATOM 363	2HG	GLU A	28	148.355	-6.657	-9.511	1.00	0.00
ATOM 364	N	ASN A	29	146.918	-9.159	-9.319	1.00	0.00
ATOM 365	CA	ASN A	29	147.013	-10.595	-9.551	1.00	0.00
ATOM 366	C	ASN A	29	147.022	-11.360	-8.230	1.00	0.00
ATOM 367	O	ASN A	29	146.158	-12.203	-7.987	1.00	0.00
ATOM 368	CB	ASN A	29	148.275	-10.920	-10.354	1.00	0.00
ATOM 369	CG	ASN A	29	147.996	-11.056	-11.838	1.00	0.00
ATOM 370	OD1	ASN A	29	147.912	-12.164	-12.367	1.00	0.00
ATOM 371	ND2	ASN A	29	147.853	-9.925	-12.519	1.00	0.00

ATOM 372	H	ASN A	29	147.660	-8.580	-9.594	1.00	0.00
ATOM 373	HA	ASN A	29	146.146	-10.896	-10.121	1.00	0.00
ATOM 374	1HB	ASN A	29	148.997	-10.130	-10.214	1.00	0.00
ATOM 375	2HB	ASN A	29	148.691	-11.852	-9.998	1.00	0.00
ATOM 376	1HD2	ASN A	29	147.934	-9.078	-12.031	1.00	0.00
ATOM 377	2HD2	ASN A	29	147.672	-9.983	-13.480	1.00	0.00
ATOM 378	N	PRO A	30	148.002	-11.075	-7.356	1.00	0.00
ATOM 379	CA	PRO A	30	148.120	-11.741	-6.056	1.00	0.00
ATOM 380	C	PRO A	30	147.114	-11.205	-5.038	1.00	0.00
ATOM 381	O	PRO A	30	147.237	-10.072	-4.573	1.00	0.00
ATOM 382	CB	PRO A	30	149.546	-11.404	-5.625	1.00	0.00
ATOM 383	CG	PRO A	30	149.829	-10.088	-6.263	1.00	0.00
ATOM 384	CD	PRO A	30	149.076	-10.083	-7.567	1.00	0.00
ATOM 385	HA	PRO A	30	148.011	-12.810	-6.147	1.00	0.00
ATOM 386	1HB	PRO A	30	149.593	-11.340	-4.546	1.00	0.00
ATOM 387	2HB	PRO A	30	150.223	-12.167	-5.977	1.00	0.00
ATOM 388	1HG	PRO A	30	149.481	-9.289	-5.626	1.00	0.00
ATOM 389	2HG	PRO A	30	150.890	-9.989	-6.444	1.00	0.00
ATOM 390	1HD	PRO A	30	148.662	-9.105	-7.757	1.00	0.00
ATOM 391	2HD	PRO A	30	149.722	-10.382	-8.377	1.00	0.00
ATOM 392	N	PRO A	31	146.100	-12.014	-4.676	1.00	0.00
ATOM 393	CA	PRO A	31	145.077	-11.606	-3.707	1.00	0.00
ATOM 394	C	PRO A	31	145.637	-11.476	-2.293	1.00	0.00
ATOM 395	O	PRO A	31	145.647	-12.440	-1.529	1.00	0.00
ATOM 396	CB	PRO A	31	144.050	-12.738	-3.773	1.00	0.00
ATOM 397	CG	PRO A	31	144.818	-13.920	-4.250	1.00	0.00
ATOM 398	CD	PRO A	31	145.872	-13.382	-5.177	1.00	0.00
ATOM 399	HA	PRO A	31	144.611	-10.675	-3.994	1.00	0.00
ATOM 400	1HB	PRO A	31	143.633	-12.906	-2.791	1.00	0.00

ATOM 401	2HB	PRO A	31	143.263	-12.474	-4.464	1.00	0.00
ATOM 402	1HG	PRO A	31	145.278	-14.423	-3.411	1.00	0.00
ATOM 403	2HG	PRO A	31	144.163	-14.596	-4.779	1.00	0.00
ATOM 404	1HD	PRO A	31	146.773	-13.973	-5.109	1.00	0.00
ATOM 405	2HD	PRO A	31	145.507	-13.363	-6.193	1.00	0.00
ATOM 406	N	PHE A	32	146.101	-10.278	-1.955	1.00	0.00
ATOM 407	CA	PHE A	32	146.662	-10.020	-0.634	1.00	0.00
ATOM 408	C	PHE A	32	145.773	-9.069	0.160	1.00	0.00
ATOM 409	O	PHE A	32	144.803	-8.524	-0.368	1.00	0.00
ATOM 410	CB	PHE A	32	148.070	-9.434	-0.760	1.00	0.00
ATOM 411	CG	PHE A	32	148.162	-8.301	-1.742	1.00	0.00
ATOM 412	CD1	PHE A	32	148.899	-8.435	-2.907	1.00	0.00
ATOM 413	CD2	PHE A	32	147.511	-7.102	-1.499	1.00	0.00
ATOM 414	CE1	PHE A	32	148.985	-7.394	-3.813	1.00	0.00
ATOM 415	CE2	PHE A	32	147.593	-6.057	-2.400	1.00	0.00
ATOM 416	CZ	PHE A	32	148.331	-6.203	-3.558	1.00	0.00
ATOM 417	H	PHE A	32	146.065	-9.548	-2.609	1.00	0.00
ATOM 418	HA	PHE A	32	146.721	-10.962	-0.109	1.00	0.00
ATOM 419	1HB	PHE A	32	148.386	-9.064	0.204	1.00	0.00
ATOM 420	2HB	PHE A	32	148.748	-10.211	-1.083	1.00	0.00
ATOM 421	HD1	PHE A	32	149.409	-9.365	-3.107	1.00	0.00
ATOM 422	HD2	PHE A	32	146.933	-6.987	-0.593	1.00	0.00
ATOM 423	HE1	PHE A	32	149.563	-7.510	-4.717	1.00	0.00
ATOM 424	HE2	PHE A	32	147.082	-5.128	-2.199	1.00	0.00
ATOM 425	HZ	PHE A	32	148.397	-5.389	-4.264	1.00	0.00
ATOM 426	N	TYR A	33	146.109	-8.875	1.431	1.00	0.00
ATOM 427	CA	TYR A	33	145.340	-7.989	2.298	1.00	0.00
ATOM 428	C	TYR A	33	146.263	-7.088	3.112	1.00	0.00
ATOM 429	O	TYR A	33	147.282	-7.538	3.635	1.00	0.00

ATOM 430	CB	TYR A	33	144.448	-8.807	3.236	1.00	0.00
ATOM 431	CG	TYR A	33	143.132	-9.218	2.616	1.00	0.00
ATOM 432	CD1	TYR A	33	142.336	-8.293	1.954	1.00	0.00
ATOM 433	CD2	TYR A	33	142.687	-10.531	2.692	1.00	0.00
ATOM 434	CE1	TYR A	33	141.131	-8.664	1.386	1.00	0.00
ATOM 435	CE2	TYR A	33	141.485	-10.911	2.126	1.00	0.00
ATOM 436	CZ	TYR A	33	140.711	-9.974	1.474	1.00	0.00
ATOM 437	OH	TYR A	33	139.514	-10.348	0.910	1.00	0.00
ATOM 438	H	TYR A	33	146.892	-9.337	1.795	1.00	0.00
ATOM 439	HA	TYR A	33	144.715	-7.371	1.670	1.00	0.00
ATOM 440	1HB	TYR A	33	144.972	-9.705	3.527	1.00	0.00
ATOM 441	2HB	TYR A	33	144.233	-8.221	4.117	1.00	0.00
ATOM 442	HD1	TYR A	33	142.667	-7.267	1.885	1.00	0.00
ATOM 443	HD2	TYR A	33	143.295	-11.264	3.203	1.00	0.00
ATOM 444	HE1	TYR A	33	140.527	-7.930	0.875	1.00	0.00
ATOM 445	HE2	TYR A	33	141.156	-11.937	2.196	1.00	0.00
ATOM 446	HH	TYR A	33	139.057	-10.955	1.498	1.00	0.00
ATOM 447	N	GLY A	34	145.899	-5.814	3.214	1.00	0.00
ATOM 448	CA	GLY A	34	146.705	-4.871	3.966	1.00	0.00
ATOM 449	C	GLY A	34	145.905	-3.675	4.442	1.00	0.00
ATOM 450	O	GLY A	34	144.740	-3.513	4.077	1.00	0.00
ATOM 451	H	GLY A	34	145.075	-5.513	2.776	1.00	0.00
ATOM 452	1HA	GLY A	34	147.123	-5.375	4.825	1.00	0.00
ATOM 453	2HA	GLY A	34	147.511	-4.524	3.338	1.00	0.00
ATOM 454	N	VAL A	35	146.531	-2.835	5.261	1.00	0.00
ATOM 455	CA	VAL A	35	145.870	-1.647	5.789	1.00	0.00
ATOM 456	C	VAL A	35	146.552	-0.375	5.292	1.00	0.00
ATOM 457	O	VAL A	35	147.766	-0.345	5.095	1.00	0.00
ATOM 458	CB	VAL A	35	145.861	-1.649	7.330	1.00	0.00

ATOM 459	CG1	VAL A	35	147.281	-1.641	7.878	1.00	0.00
ATOM 460	CG2	VAL A	35	145.069	-0.464	7.864	1.00	0.00
ATOM 461	H	VAL A	35	147.459	-3.018	5.515	1.00	0.00
ATOM 462	HA	VAL A	35	144.846	-1.653	5.443	1.00	0.00
ATOM 463	HB	VAL A	35	145.378	-2.556	7.665	1.00	0.00
ATOM 464	1HG1	VAL A	35	147.861	-0.890	7.361	1.00	0.00
ATOM 465	2HG1	VAL A	35	147.730	-2.611	7.726	1.00	0.00
ATOM 466	3HG1	VAL A	35	147.259	-1.415	8.934	1.00	0.00
ATOM 467	1HG2	VAL A	35	144.397	-0.107	7.098	1.00	0.00
ATOM 468	2HG2	VAL A	35	145.749	0.326	8.144	1.00	0.00
ATOM 469	3HG2	VAL A	35	144.500	-0.772	8.729	1.00	0.00
ATOM 470	N	ILE A	36	145.761	0.675	5.093	1.00	0.00
ATOM 471	CA	ILE A	36	146.289	1.949	4.620	1.00	0.00
ATOM 472	C	ILE A	36	147.261	2.548	5.632	1.00	0.00
ATOM 473	O	ILE A	36	147.108	2.361	6.840	1.00	0.00
ATOM 474	CB	ILE A	36	145.160	2.962	4.345	1.00	0.00
ATOM 475	CG1	ILE A	36	144.100	2.342	3.431	1.00	0.00
ATOM 476	CG2	ILE A	36	145.726	4.232	3.724	1.00	0.00
ATOM 477	CD1	ILE A	36	142.962	3.283	3.101	1.00	0.00
ATOM 478	H	ILE A	36	144.801	0.591	5.268	1.00	0.00
ATOM 479	HA	ILE A	36	146.816	1.768	3.695	1.00	0.00
ATOM 480	HB	ILE A	36	144.704	3.224	5.288	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.564	2.046	2.502	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.683	1.472	3.913	1.00	0.00
ATOM 483	1HG2	ILE A	36	146.440	4.677	4.402	1.00	0.00
ATOM 484	2HG2	ILE A	36	144.923	4.930	3.538	1.00	0.00
ATOM 485	3HG2	ILE A	36	146.216	3.989	2.794	1.00	0.00
ATOM 486	1HD1	ILE A	36	143.360	4.209	2.712	1.00	0.00
ATOM 487	2HD1	ILE A	36	142.390	3.485	3.995	1.00	0.00

ATOM 488	3HD1	ILE A	36	142.321	2.827	2.360	1.00	0.00
ATOM 489	N	ARG A	37	148.260	3.266	5.132	1.00	0.00
ATOM 490	CA	ARG A	37	149.257	3.890	5.993	1.00	0.00
ATOM 491	C	ARG A	37	149.449	5.360	5.629	1.00	0.00
ATOM 492	O	ARG A	37	149.125	6.251	6.413	1.00	0.00
ATOM 493	CB	ARG A	37	150.590	3.149	5.885	1.00	0.00
ATOM 494	CG	ARG A	37	150.463	1.645	6.063	1.00	0.00
ATOM 495	CD	ARG A	37	150.492	1.254	7.532	1.00	0.00
ATOM 496	NE	ARG A	37	149.280	1.671	8.234	1.00	0.00
ATOM 497	CZ	ARG A	37	149.190	1.779	9.558	1.00	0.00
ATOM 498	NH1	ARG A	37	150.236	1.502	10.326	1.00	0.00
ATOM 499	NH2	ARG A	37	148.049	2.166	10.114	1.00	0.00
ATOM 500	H	ARG A	37	148.330	3.378	4.161	1.00	0.00
ATOM 501	HA	ARG A	37	148.903	3.828	7.011	1.00	0.00
ATOM 502	1HB	ARG A	37	151.018	3.340	4.912	1.00	0.00
ATOM 503	2HB	ARG A	37	151.261	3.524	6.644	1.00	0.00
ATOM 504	1HG	ARG A	37	149.529	1.318	5.633	1.00	0.00
ATOM 505	2HG	ARG A	37	151.286	1.161	5.556	1.00	0.00
ATOM 506	1HD	ARG A	37	150.587	0.181	7.604	1.00	0.00
ATOM 507	2HD	ARG A	37	151.345	1.722	7.999	1.00	0.00
ATOM 508	HE	ARG A	37	148.493	1.881	7.691	1.00	0.00
ATOM 509	1HH1	ARG A	37	151.098	1.209	9.913	1.00	0.00
ATOM 510	2HH1	ARG A	37	150.161	1.585	11.320	1.00	0.00
ATOM 511	1HH2	ARG A	37	147.259	2.376	9.540	1.00	0.00
ATOM 512	2HH2	ARG A	37	147.982	2.247	11.108	1.00	0.00
ATOM 513	N	TRP A	38	149.977	5.605	4.434	1.00	0.00
ATOM 514	CA	TRP A	38	150.210	6.967	3.968	1.00	0.00
ATOM 515	C	TRP A	38	149.461	7.233	2.665	1.00	0.00
ATOM 516	O	TRP A	38	149.556	6.459	1.712	1.00	0.00



ATOM 517	CB	TRP A	38	151.709	7.216	3.772	1.00	0.00
ATOM 518	CG	TRP A	38	152.013	8.486	3.032	1.00	0.00
ATOM 519	CD1	TRP A	38	152.250	9.716	3.576	1.00	0.00
ATOM 520	CD2	TRP A	38	152.100	8.650	1.612	1.00	0.00
ATOM 521	NE1	TRP A	38	152.480	10.635	2.580	1.00	0.00
ATOM 522	CE2	TRP A	38	152.395	10.004	1.365	1.00	0.00
ATOM 523	CE3	TRP A	38	151.959	7.782	0.525	1.00	0.00
ATOM 524	CZ2	TRP A	38	152.550	10.509	0.076	1.00	0.00
ATOM 525	CZ3	TRP A	38	152.114	8.285	-0.753	1.00	0.00
ATOM 526	CH2	TRP A	38	152.406	9.637	-0.968	1.00	0.00
ATOM 527	H	TRP A	38	150.215	4.852	3.852	1.00	0.00
ATOM 528	HA	TRP A	38	149.839	7.642	4.724	1.00	0.00
ATOM 529	1HB	TRP A	38	152.188	7.272	4.739	1.00	0.00
ATOM 530	2HB	TRP A	38	152.134	6.395	3.212	1.00	0.00
ATOM 531	HD1	TRP A	38	152.253	9.922	4.636	1.00	0.00
ATOM 532	HE1	TRP A	38	152.676	11.585	2.716	1.00	0.00
ATOM 533	HE3	TRP A	38	151.734	6.737	0.672	1.00	0.00
ATOM 534	HZ2	TRP A	38	152.772	11.549	-0.107	1.00	0.00
ATOM 535	HZ3	TRP A	38	152.009	7.629	-1.604	1.00	0.00
ATOM 536	HH2	TRP A	38	152.519	9.986	-1.984	1.00	0.00
ATOM 537	N	ILE A	39	148.726	8.338	2.631	1.00	0.00
ATOM 538	CA	ILE A	39	147.967	8.719	1.446	1.00	0.00
ATOM 539	C	ILE A	39	148.411	10.088	0.940	1.00	0.00
ATOM 540	O	ILE A	39	148.093	11.113	1.541	1.00	0.00
ATOM 541	CB	ILE A	39	146.454	8.753	1.731	1.00	0.00
ATOM 542	CG1	ILE A	39	146.012	7.460	2.417	1.00	0.00
ATOM 543	CG2	ILE A	39	145.675	8.969	0.442	1.00	0.00
ATOM 544	CD1	ILE A	39	144.676	7.574	3.117	1.00	0.00
ATOM 545	H	ILE A	39	148.697	8.917	3.421	1.00	0.00

ATOM 546	HA	ILE A	39	148.154	7.983	0.677	1.00	0.00
ATOM 547	HB	ILE A	39	146.253	9.587	2.386	1.00	0.00
ATOM 548	1HG1	ILE A	39	145.933	6.677	1.678	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.751	7.181	3.154	1.00	0.00
ATOM 550	1HG2	ILE A	39	144.625	8.799	0.623	1.00	0.00
ATOM 551	2HG2	ILE A	39	146.028	8.278	-0.310	1.00	0.00
ATOM 552	3HG2	ILE A	39	145.822	9.982	0.098	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.179	8.477	2.800	1.00	0.00
ATOM 554	2HD1	ILE A	39	144.830	7.604	4.186	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.064	6.719	2.866	1.00	0.00
ATOM 556	N	GLY A	40	149.152	10.097	-0.164	1.00	0.00
ATOM 557	CA	GLY A	40	149.630	11.349	-0.720	1.00	0.00
ATOM 558	C	GLY A	40	150.140	11.202	-2.140	1.00	0.00
ATOM 559	O	GLY A	40	149.996	10.144	-2.755	1.00	0.00
ATOM 560	H	GLY A	40	149.379	9.250	-0.599	1.00	0.00
ATOM 561	1HA	GLY A	40	148.823	12.064	-0.713	1.00	0.00
ATOM 562	2HA	GLY A	40	150.431	11.721	-0.100	1.00	0.00
ATOM 563	N	GLN A	41	150.738	12.268	-2.659	1.00	0.00
ATOM 564	CA	GLN A	41	151.275	12.266	-4.014	1.00	0.00
ATOM 565	C	GLN A	41	152.744	12.682	-4.013	1.00	0.00
ATOM 566	O	GLN A	41	153.073	13.816	-3.661	1.00	0.00
ATOM 567	CB	GLN A	41	150.463	13.213	-4.899	1.00	0.00
ATOM 568	CG	GLN A	41	148.960	13.014	-4.785	1.00	0.00
ATOM 569	CD	GLN A	41	148.199	14.324	-4.770	1.00	0.00
ATOM 570	OE1	GLN A	41	148.192	15.042	-3.770	1.00	0.00
ATOM 571	NE2	GLN A	41	147.550	14.643	-5.884	1.00	0.00
ATOM 572	H	GLN A	41	150.820	13.080	-2.117	1.00	0.00
ATOM 573	HA	GLN A	41	151.192	11.264	-4.405	1.00	0.00
ATOM 574	1HB	GLN A	41	150.692	14.230	-4.618	1.00	0.00

ATOM 575	2HB	GLN A	41	150.750	13.060	-5.927	1.00	0.00
ATOM 576	1HG	GLN A	41	148.623	12.428	-5.626	1.00	0.00
ATOM 577	2HG	GLN A	41	148.750	12.481	-3.869	1.00	0.00
ATOM 578	1HE2	GLN A	41	147.599	14.024	-6.642	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.049	15.485	-5.903	1.00	0.00
ATOM 580	N	PRO A	42	153.655	11.772	-4.405	1.00	0.00
ATOM 581	CA	PRO A	42	155.092	12.061	-4.440	1.00	0.00
ATOM 582	C	PRO A	42	155.420	13.259	-5.326	1.00	0.00
ATOM 583	O	PRO A	42	154.629	13.637	-6.191	1.00	0.00
ATOM 584	CB	PRO A	42	155.706	10.783	-5.022	1.00	0.00
ATOM 585	CG	PRO A	42	154.698	9.719	-4.754	1.00	0.00
ATOM 586	CD	PRO A	42	153.361	10.395	-4.841	1.00	0.00
ATOM 587	HA	PRO A	42	155.484	12.233	-3.448	1.00	0.00
ATOM 588	1HB	PRO A	42	155.874	10.911	-6.081	1.00	0.00
ATOM 589	2HB	PRO A	42	156.642	10.573	-4.526	1.00	0.00
ATOM 590	1HG	PRO A	42	154.776	8.942	-5.499	1.00	0.00
ATOM 591	2HG	PRO A	42	154.848	9.311	-3.765	1.00	0.00
ATOM 592	1HD	PRO A	42	152.996	10.381	-5.857	1.00	0.00
ATOM 593	2HD	PRO A	42	152.653	9.922	-4.176	1.00	0.00
ATOM 594	N	PRO A	43	156.595	13.876	-5.121	1.00	0.00
ATOM 595	CA	PRO A	43	157.024	15.037	-5.905	1.00	0.00
ATOM 596	C	PRO A	43	157.402	14.663	-7.333	1.00	0.00
ATOM 597	O	PRO A	43	158.567	14.392	-7.627	1.00	0.00
ATOM 598	CB	PRO A	43	158.249	15.545	-5.146	1.00	0.00
ATOM 599	CG	PRO A	43	158.788	14.344	-4.449	1.00	0.00
ATOM 600	CD	PRO A	43	157.597	13.489	-4.110	1.00	0.00
ATOM 601	HA	PRO A	43	156.264	15.804	-5.924	1.00	0.00
ATOM 602	1HB	PRO A	43	158.965	15.950	-5.847	1.00	0.00
ATOM 603	2HB	PRO A	43	157.951	16.307	-4.443	1.00	0.00

ATOM 604	1HG	PRO A	43	159.457	13.808	-5.107	1.00	0.00
ATOM 605	2HG	PRO A	43	159.304	14.642	-3.549	1.00	0.00
ATOM 606	1HD	PRO A	43	157.847	12.442	-4.196	1.00	0.00
ATOM 607	2HD	PRO A	43	157.244	13.713	-3.114	1.00	0.00
ATOM 608	N	GLY A	44	156.412	14.650	-8.219	1.00	0.00
ATOM 609	CA	GLY A	44	156.666	14.309	-9.605	1.00	0.00
ATOM 610	C	GLY A	44	155.424	13.817	-10.320	1.00	0.00
ATOM 611	O	GLY A	44	155.089	14.302	-11.401	1.00	0.00
ATOM 612	H	GLY A	44	155.503	14.876	-7.929	1.00	0.00
ATOM 613	1HA	GLY A	44	157.039	15.183	-10.117	1.00	0.00
ATOM 614	2HA	GLY A	44	157.418	13.535	-9.641	1.00	0.00
ATOM 615	N	LEU A	45	154.738	12.852	-9.716	1.00	0.00
ATOM 616	CA	LEU A	45	153.525	12.298	-10.306	1.00	0.00
ATOM 617	C	LEU A	45	152.337	12.469	-9.368	1.00	0.00
ATOM 618	O	LEU A	45	152.290	11.867	-8.297	1.00	0.00
ATOM 619	CB	LEU A	45	153.722	10.815	-10.630	1.00	0.00
ATOM 620	CG	LEU A	45	154.338	9.984	-9.503	1.00	0.00
ATOM 621	CD1	LEU A	45	154.029	8.505	-9.697	1.00	0.00
ATOM 622	CD2	LEU A	45	155.842	10.216	-9.432	1.00	0.00
ATOM 623	H	LEU A	45	155.053	12.507	-8.852	1.00	0.00
ATOM 624	HA	LEU A	45	153.326	12.833	-11.222	1.00	0.00
ATOM 625	1HB	LEU A	45	152.760	10.391	-10.877	1.00	0.00
ATOM 626	2HB	LEU A	45	154.364	10.739	-11.495	1.00	0.00
ATOM 627	HG	LEU A	45	153.907	10.292	-8.561	1.00	0.00
ATOM 628	1HD1	LEU A	45	153.531	8.361	-10.644	1.00	0.00
ATOM 629	2HD1	LEU A	45	153.386	8.164	-8.898	1.00	0.00
ATOM 630	3HD1	LEU A	45	154.949	7.939	-9.684	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.072	10.818	-8.566	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.170	10.728	-10.324	1.00	0.00

ATOM 633	3HD2	LEU A	45	156.351	9.266	-9.355	1.00	0.00
ATOM 634	N	ASN A	46	151.375	13.292	-9.776	1.00	0.00
ATOM 635	CA	ASN A	46	150.192	13.528	-8.962	1.00	0.00
ATOM 636	C	ASN A	46	149.268	12.316	-9.000	1.00	0.00
ATOM 637	O	ASN A	46	148.624	12.044	-10.013	1.00	0.00
ATOM 638	CB	ASN A	46	149.446	14.769	-9.454	1.00	0.00
ATOM 639	CG	ASN A	46	148.709	15.484	-8.339	1.00	0.00
ATOM 640	OD1	ASN A	46	147.479	15.539	-8.328	1.00	0.00
ATOM 641	ND2	ASN A	46	149.460	16.036	-7.393	1.00	0.00
ATOM 642	H	ASN A	46	151.462	13.744	-10.641	1.00	0.00
ATOM 643	HA	ASN A	46	150.513	13.691	-7.944	1.00	0.00
ATOM 644	1HB	ASN A	46	150.154	15.457	-9.891	1.00	0.00
ATOM 645	2HB	ASN A	46	148.727	14.474	-10.206	1.00	0.00
ATOM 646	1HD2	ASN A	46	150.433	15.953	-7.468	1.00	0.00
ATOM 647	2HD2	ASN A	46	149.009	16.505	-6.660	1.00	0.00
ATOM 648	N	GLU A	47	149.212	11.591	-7.889	1.00	0.00
ATOM 649	CA	GLU A	47	148.370	10.404	-7.789	1.00	0.00
ATOM 650	C	GLU A	47	148.235	9.958	-6.339	1.00	0.00
ATOM 651	O	GLU A	47	149.230	9.655	-5.679	1.00	0.00
ATOM 652	CB	GLU A	47	148.948	9.266	-8.634	1.00	0.00
ATOM 653	CG	GLU A	47	150.467	9.182	-8.595	1.00	0.00
ATOM 654	CD	GLU A	47	151.033	8.332	-9.715	1.00	0.00
ATOM 655	OE1	GLU A	47	151.096	8.825	-10.861	1.00	0.00
ATOM 656	OE2	GLU A	47	151.415	7.173	-9.446	1.00	0.00
ATOM 657	H	GLU A	47	149.752	11.859	-7.117	1.00	0.00
ATOM 658	HA	GLU A	47	147.392	10.660	-8.167	1.00	0.00
ATOM 659	1HB	GLU A	47	148.550	8.329	-8.275	1.00	0.00
ATOM 660	2HB	GLU A	47	148.645	9.405	-9.662	1.00	0.00
ATOM 661	1HG	GLU A	47	150.872	10.179	-8.681	1.00	0.00

ATOM 662	2HG	GLU A	47	150.768	8.755	-7.650	1.00	0.00
ATOM 663	N	VAL A	48	147.003	9.912	-5.846	1.00	0.00
ATOM 664	CA	VAL A	48	146.751	9.495	-4.473	1.00	0.00
ATOM 665	C	VAL A	48	147.166	8.044	-4.268	1.00	0.00
ATOM 666	O	VAL A	48	146.436	7.121	-4.633	1.00	0.00
ATOM 667	CB	VAL A	48	145.266	9.655	-4.096	1.00	0.00
ATOM 668	CG1	VAL A	48	145.057	9.375	-2.616	1.00	0.00
ATOM 669	CG2	VAL A	48	144.768	11.047	-4.457	1.00	0.00
ATOM 670	H	VAL A	48	146.248	10.161	-6.418	1.00	0.00
ATOM 671	HA	VAL A	48	147.340	10.123	-3.819	1.00	0.00
ATOM 672	HB	VAL A	48	144.693	8.934	-4.661	1.00	0.00
ATOM 673	1HG1	VAL A	48	145.200	8.321	-2.425	1.00	0.00
ATOM 674	2HG1	VAL A	48	144.055	9.659	-2.334	1.00	0.00
ATOM 675	3HG1	VAL A	48	145.769	9.945	-2.037	1.00	0.00
ATOM 676	1HG2	VAL A	48	145.443	11.500	-5.168	1.00	0.00
ATOM 677	2HG2	VAL A	48	144.724	11.656	-3.566	1.00	0.00
ATOM 678	3HG2	VAL A	48	143.783	10.975	-4.893	1.00	0.00
ATOM 679	N	LEU A	49	148.343	7.846	-3.684	1.00	0.00
ATOM 680	CA	LEU A	49	148.856	6.506	-3.434	1.00	0.00
ATOM 681	C	LEU A	49	148.772	6.164	-1.953	1.00	0.00
ATOM 682	O	LEU A	49	149.439	6.784	-1.124	1.00	0.00
ATOM 683	CB	LEU A	49	150.304	6.392	-3.915	1.00	0.00
ATOM 684	CG	LEU A	49	150.503	6.575	-5.421	1.00	0.00
ATOM 685	CD1	LEU A	49	151.948	6.937	-5.729	1.00	0.00
ATOM 686	CD2	LEU A	49	150.097	5.313	-6.168	1.00	0.00
ATOM 687	H	LEU A	49	148.880	8.621	-3.416	1.00	0.00
ATOM 688	HA	LEU A	49	148.246	5.808	-3.988	1.00	0.00
ATOM 689	1HB	LEU A	49	150.892	7.140	-3.402	1.00	0.00
ATOM 690	2HB	LEU A	49	150.677	5.416	-3.642	1.00	0.00

ATOM 691	HG	LEU A	49	149.875	7.384	-5.765	1.00	0.00
ATOM 692	1HD1	LEU A	49	151.984	7.547	-6.619	1.00	0.00
ATOM 693	2HD1	LEU A	49	152.519	6.035	-5.886	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.366	7.487	-4.898	1.00	0.00
ATOM 695	1HD2	LEU A	49	149.362	4.774	-5.589	1.00	0.00
ATOM 696	2HD2	LEU A	49	150.966	4.689	-6.318	1.00	0.00
ATOM 697	3HD2	LEU A	49	149.676	5.581	-7.125	1.00	0.00
ATOM 698	N	ALA A	50	147.948	5.176	-1.625	1.00	0.00
ATOM 699	CA	ALA A	50	147.780	4.758	-0.242	1.00	0.00
ATOM 700	C	ALA A	50	148.746	3.631	0.112	1.00	0.00
ATOM 701	O	ALA A	50	148.657	2.531	-0.433	1.00	0.00
ATOM 702	CB	ALA A	50	146.342	4.325	0.007	1.00	0.00
ATOM 703	H	ALA A	50	147.443	4.719	-2.329	1.00	0.00
ATOM 704	HA	ALA A	50	147.989	5.610	0.387	1.00	0.00
ATOM 705	1HB	ALA A	50	145.712	4.691	-0.789	1.00	0.00
ATOM 706	2HB	ALA A	50	146.003	4.728	0.949	1.00	0.00
ATOM 707	3HB	ALA A	50	146.292	3.246	0.039	1.00	0.00
ATOM 708	N	GLY A	51	149.668	3.914	1.025	1.00	0.00
ATOM 709	CA	GLY A	51	150.637	2.915	1.434	1.00	0.00
ATOM 710	C	GLY A	51	150.011	1.789	2.232	1.00	0.00
ATOM 711	O	GLY A	51	149.679	1.961	3.406	1.00	0.00
ATOM 712	H	GLY A	51	149.691	4.808	1.425	1.00	0.00
ATOM 713	1HA	GLY A	51	151.104	2.499	0.553	1.00	0.00
ATOM 714	2HA	GLY A	51	151.396	3.391	2.039	1.00	0.00
ATOM 715	N	LEU A	52	149.848	0.634	1.596	1.00	0.00
ATOM 716	CA	LEU A	52	149.257	-0.524	2.256	1.00	0.00
ATOM 717	C	LEU A	52	150.331	-1.381	2.919	1.00	0.00
ATOM 718	O	LEU A	52	151.450	-1.488	2.418	1.00	0.00
ATOM 719	CB	LEU A	52	148.468	-1.365	1.248	1.00	0.00

ATOM 720	CG	LEU A	52	147.201	-0.702	0.703	1.00	0.00
ATOM 721	CD1	LEU A	52	146.592	-1.549	-0.403	1.00	0.00
ATOM 722	CD2	LEU A	52	146.196	-0.478	1.823	1.00	0.00
ATOM 723	H	LEU A	52	150.133	0.558	0.662	1.00	0.00
ATOM 724	HA	LEU A	52	148.581	-0.163	3.016	1.00	0.00
ATOM 725	1HB	LEU A	52	149.119	-1.592	0.416	1.00	0.00
ATOM 726	2HB	LEU A	52	148.187	-2.291	1.726	1.00	0.00
ATOM 727	HG	LEU A	52	147.458	0.260	0.284	1.00	0.00
ATOM 728	1HD1	LEU A	52	146.403	-2.546	-0.032	1.00	0.00
ATOM 729	2HD1	LEU A	52	147.276	-1.599	-1.237	1.00	0.00
ATOM 730	3HD1	LEU A	52	145.663	-1.103	-0.726	1.00	0.00
ATOM 731	1HD2	LEU A	52	146.362	-1.202	2.607	1.00	0.00
ATOM 732	2HD2	LEU A	52	145.194	-0.592	1.434	1.00	0.00
ATOM 733	3HD2	LEU A	52	146.316	0.519	2.220	1.00	0.00
ATOM 734	N	GLU A	53	149.982	-1.988	4.049	1.00	0.00
ATOM 735	CA	GLU A	53	150.916	-2.836	4.781	1.00	0.00
ATOM 736	C	GLU A	53	150.448	-4.287	4.782	1.00	0.00
ATOM 737	O	GLU A	53	149.515	-4.649	5.499	1.00	0.00
ATOM 738	CB	GLU A	53	151.069	-2.336	6.219	1.00	0.00
ATOM 739	CG	GLU A	53	152.057	-3.146	7.042	1.00	0.00
ATOM 740	CD	GLU A	53	151.571	-3.395	8.457	1.00	0.00
ATOM 741	OE1	GLU A	53	151.282	-4.563	8.789	1.00	0.00
ATOM 742	OE2	GLU A	53	151.482	-2.420	9.234	1.00	0.00
ATOM 743	H	GLU A	53	149.075	-1.864	4.398	1.00	0.00
ATOM 744	HA	GLU A	53	151.874	-2.779	4.286	1.00	0.00
ATOM 745	1HB	GLU A	53	151.407	-1.311	6.198	1.00	0.00
ATOM 746	2HB	GLU A	53	150.107	-2.379	6.707	1.00	0.00
ATOM 747	1HG	GLU A	53	152.212	-4.099	6.560	1.00	0.00
ATOM 748	2HG	GLU A	53	152.994	-2.610	7.088	1.00	0.00



ATOM 749	N	LEU A	54	151.103	-5.114	3.974	1.00	0.00
ATOM 750	CA	LEU A	54	150.754	-6.527	3.881	1.00	0.00
ATOM 751	C	LEU A	54	151.046	-7.247	5.194	1.00	0.00
ATOM 752	O	LEU A	54	152.057	-6.982	5.846	1.00	0.00
ATOM 753	CB	LEU A	54	151.524	-7.191	2.739	1.00	0.00
ATOM 754	CG	LEU A	54	151.324	-6.552	1.364	1.00	0.00
ATOM 755	CD1	LEU A	54	152.297	-7.140	0.354	1.00	0.00
ATOM 756	CD2	LEU A	54	149.889	-6.740	0.895	1.00	0.00
ATOM 757	H	LEU A	54	151.838	-4.767	3.426	1.00	0.00
ATOM 758	HA	LEU A	54	149.696	-6.594	3.676	1.00	0.00
ATOM 759	1HB	LEU A	54	152.578	-7.160	2.978	1.00	0.00
ATOM 760	2HB	LEU A	54	151.219	-8.225	2.679	1.00	0.00
ATOM 761	HG	LEU A	54	151.517	-5.492	1.435	1.00	0.00
ATOM 762	1HD1	LEU A	54	152.308	-8.216	0.449	1.00	0.00
ATOM 763	2HD1	LEU A	54	153.288	-6.753	0.542	1.00	0.00
ATOM 764	3HD1	LEU A	54	151.988	-6.870	-0.644	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.541	-7.721	1.183	1.00	0.00
ATOM 766	2HD2	LEU A	54	149.846	-6.644	-0.180	1.00	0.00
ATOM 767	3HD2	LEU A	54	149.260	-5.988	1.349	1.00	0.00
ATOM 768	N	GLU A	55	150.156	-8.157	5.576	1.00	0.00
ATOM 769	CA	GLU A	55	150.320	-8.914	6.811	1.00	0.00
ATOM 770	C	GLU A	55	151.395	-9.986	6.655	1.00	0.00
ATOM 771	O	GLU A	55	152.090	-10.325	7.612	1.00	0.00
ATOM 772	CB	GLU A	55	148.994	-9.562	7.217	1.00	0.00
ATOM 773	CG	GLU A	55	147.871	-8.562	7.436	1.00	0.00
ATOM 774	CD	GLU A	55	147.824	-8.042	8.859	1.00	0.00
ATOM 775	OE1	GLU A	55	146.921	-8.458	9.615	1.00	0.00
ATOM 776	OE2	GLU A	55	148.691	-7.217	9.219	1.00	0.00
ATOM 777	H	GLU A	55	149.372	-8.323	5.014	1.00	0.00

ATOM 778	HA	GLU A	55	150.625	-8.225	7.584	1.00	0.00
ATOM 779	1HB	GLU A	55	148.689	-10.248	6.441	1.00	0.00
ATOM 780	2HB	GLU A	55	149.142	-10.112	8.134	1.00	0.00
ATOM 781	1HG	GLU A	55	148.015	-7.726	6.769	1.00	0.00
ATOM 782	2HG	GLU A	55	146.930	-9.042	7.213	1.00	0.00
ATOM 783	N	ASP A	56	151.525	-10.513	5.442	1.00	0.00
ATOM 784	CA	ASP A	56	152.516	-11.547	5.161	1.00	0.00
ATOM 785	C	ASP A	56	153.811	-10.931	4.642	1.00	0.00
ATOM 786	O	ASP A	56	153.807	-10.183	3.665	1.00	0.00
ATOM 787	CB	ASP A	56	151.967	-12.544	4.140	1.00	0.00
ATOM 788	CG	ASP A	56	152.412	-13.965	4.423	1.00	0.00
ATOM 789	OD1	ASP A	56	153.373	-14.428	3.773	1.00	0.00
ATOM 790	OD2	ASP A	56	151.800	-14.618	5.295	1.00	0.00
ATOM 791	H	ASP A	56	150.941	-10.202	4.719	1.00	0.00
ATOM 792	HA	ASP A	56	152.723	-12.067	6.085	1.00	0.00
ATOM 793	1HB	ASP A	56	150.887	-12.516	4.162	1.00	0.00
ATOM 794	2HB	ASP A	56	152.310	-12.268	3.155	1.00	0.00
ATOM 795	N	GLU A	57	154.919	-11.252	5.303	1.00	0.00
ATOM 796	CA	GLU A	57	156.222	-10.731	4.908	1.00	0.00
ATOM 797	C	GLU A	57	156.628	-11.260	3.536	1.00	0.00
ATOM 798	O	GLU A	57	157.106	-12.388	3.411	1.00	0.00
ATOM 799	CB	GLU A	57	157.282	-11.108	5.946	1.00	0.00
ATOM 800	CG	GLU A	57	157.377	-10.126	7.102	1.00	0.00
ATOM 801	CD	GLU A	57	158.593	-10.371	7.975	1.00	0.00
ATOM 802	OE1	GLU A	57	158.766	-11.514	8.445	1.00	0.00
ATOM 803	OE2	GLU A	57	159.372	-9.418	8.188	1.00	0.00
ATOM 804	H	GLU A	57	154.858	-11.854	6.074	1.00	0.00
ATOM 805	HA	GLU A	57	156.148	-9.655	4.858	1.00	0.00
ATOM 806	1HB	GLU A	57	157.044	-12.082	6.347	1.00	0.00

ATOM 807	2HB	GLU A	57	158.245	-11.154	5.460	1.00	0.00
ATOM 808	1HG	GLU A	57	157.436	-9.124	6.703	1.00	0.00
ATOM 809	2HG	GLU A	57	156.490	-10.219	7.711	1.00	0.00
ATOM 810	N	CYS A	58	156.432	-10.439	2.510	1.00	0.00
ATOM 811	CA	CYS A	58	156.777	-10.825	1.146	1.00	0.00
ATOM 812	C	CYS A	58	158.157	-10.301	0.765	1.00	0.00
ATOM 813	O	CYS A	58	158.426	-9.103	0.859	1.00	0.00
ATOM 814	CB	CYS A	58	155.730	-10.297	0.164	1.00	0.00
ATOM 815	SG	CYS A	58	155.833	-11.026	-1.487	1.00	0.00
ATOM 816	H	CYS A	58	156.047	-9.553	2.673	1.00	0.00
ATOM 817	HA	CYS A	58	156.789	-11.903	1.100	1.00	0.00
ATOM 818	1HB	CYS A	58	154.745	-10.506	0.553	1.00	0.00
ATOM 819	2HB	CYS A	58	155.851	-9.229	0.060	1.00	0.00
ATOM 820	HG	CYS A	58	155.366	-10.449	-2.096	1.00	0.00
ATOM 821	N	ALA A	59	159.031	-11.207	0.335	1.00	0.00
ATOM 822	CA	ALA A	59	160.383	-10.836	-0.060	1.00	0.00
ATOM 823	C	ALA A	59	160.374	-10.001	-1.337	1.00	0.00
ATOM 824	O	ALA A	59	160.036	-10.496	-2.411	1.00	0.00
ATOM 825	CB	ALA A	59	161.238	-12.081	-0.249	1.00	0.00
ATOM 826	H	ALA A	59	158.758	-12.146	0.282	1.00	0.00
ATOM 827	HA	ALA A	59	160.815	-10.250	0.738	1.00	0.00
ATOM 828	1HB	ALA A	59	161.020	-12.524	-1.210	1.00	0.00
ATOM 829	2HB	ALA A	59	161.015	-12.792	0.533	1.00	0.00
ATOM 830	3HB	ALA A	59	162.282	-11.811	-0.205	1.00	0.00
ATOM 831	N	GLY A	60	160.746	-8.732	-1.209	1.00	0.00
ATOM 832	CA	GLY A	60	160.773	-7.848	-2.360	1.00	0.00
ATOM 833	C	GLY A	60	160.174	-6.487	-2.062	1.00	0.00
ATOM 834	O	GLY A	60	160.550	-5.488	-2.673	1.00	0.00
ATOM 835	H	GLY A	60	161.005	-8.392	-0.328	1.00	0.00

ATOM 836	1HA	GLY A	60	161.797	-7.717	-2.677	1.00	0.00
ATOM 837	2HA	GLY A	60	160.215	-8.306	-3.165	1.00	0.00
ATOM 838	N	CYS A	61	159.239	-6.449	-1.118	1.00	0.00
ATOM 839	CA	CYS A	61	158.586	-5.201	-0.739	1.00	0.00
ATOM 840	C	CYS A	61	159.505	-4.349	0.132	1.00	0.00
ATOM 841	O	CYS A	61	160.621	-4.755	0.456	1.00	0.00
ATOM 842	CB	CYS A	61	157.281	-5.490	0.005	1.00	0.00
ATOM 843	SG	CYS A	61	156.114	-6.515	-0.920	1.00	0.00
ATOM 844	H	CYS A	61	158.981	-7.280	-0.667	1.00	0.00
ATOM 845	HA	CYS A	61	158.361	-4.657	-1.644	1.00	0.00
ATOM 846	1HB	CYS A	61	157.507	-6.002	0.928	1.00	0.00
ATOM 847	2HB	CYS A	61	156.791	-4.554	0.230	1.00	0.00
ATOM 848	HG	CYS A	61	155.351	-6.675	-0.360	1.00	0.00
ATOM 849	N	THR A	62	159.026	-3.168	0.508	1.00	0.00
ATOM 850	CA	THR A	62	159.805	-2.260	1.342	1.00	0.00
ATOM 851	C	THR A	62	159.217	-2.171	2.746	1.00	0.00
ATOM 852	O	THR A	62	158.231	-2.839	3.059	1.00	0.00
ATOM 853	CB	THR A	62	159.854	-0.868	0.708	1.00	0.00
ATOM 854	OG1	THR A	62	158.550	-0.421	0.380	1.00	0.00
ATOM 855	CG2	THR A	62	160.689	-0.814	-0.553	1.00	0.00
ATOM 856	H	THR A	62	158.130	-2.901	0.218	1.00	0.00
ATOM 857	HA	THR A	62	160.810	-2.650	1.410	1.00	0.00
ATOM 858	HB	THR A	62	160.282	-0.176	1.418	1.00	0.00
ATOM 859	HG1	THR A	62	158.188	-0.974	-0.315	1.00	0.00
ATOM 860	1HG2	THR A	62	160.904	-1.819	-0.886	1.00	0.00
ATOM 861	2HG2	THR A	62	161.615	-0.296	-0.349	1.00	0.00
ATOM 862	3HG2	THR A	62	160.144	-0.288	-1.323	1.00	0.00
ATOM 863	N	ASP A	63	159.827	-1.342	3.587	1.00	0.00
ATOM 864	CA	ASP A	63	159.363	-1.166	4.958	1.00	0.00

ATOM 865	C	ASP A	63	158.671	0.182	5.130	1.00	0.00
ATOM 866	O	ASP A	63	158.779	0.818	6.178	1.00	0.00
ATOM 867	CB	ASP A	63	160.536	-1.278	5.934	1.00	0.00
ATOM 868	CG	ASP A	63	161.601	-0.229	5.680	1.00	0.00
ATOM 869	OD1	ASP A	63	162.691	-0.596	5.192	1.00	0.00
ATOM 870	OD2	ASP A	63	161.345	0.958	5.968	1.00	0.00
ATOM 871	H	ASP A	63	160.608	-0.838	3.278	1.00	0.00
ATOM 872	HA	ASP A	63	158.653	-1.952	5.171	1.00	0.00
ATOM 873	1HB	ASP A	63	160.170	-1.156	6.942	1.00	0.00
ATOM 874	2HB	ASP A	63	160.987	-2.255	5.834	1.00	0.00
ATOM 875	N	GLY A	64	157.960	0.612	4.093	1.00	0.00
ATOM 876	CA	GLY A	64	157.260	1.882	4.148	1.00	0.00
ATOM 877	C	GLY A	64	158.013	2.990	3.440	1.00	0.00
ATOM 878	O	GLY A	64	158.125	4.102	3.956	1.00	0.00
ATOM 879	H	GLY A	64	157.909	0.062	3.282	1.00	0.00
ATOM 880	1HA	GLY A	64	156.291	1.767	3.687	1.00	0.00
ATOM 881	2HA	GLY A	64	157.123	2.160	5.183	1.00	0.00
ATOM 882	N	THR A	65	158.529	2.687	2.253	1.00	0.00
ATOM 883	CA	THR A	65	159.276	3.667	1.472	1.00	0.00
ATOM 884	C	THR A	65	158.845	3.638	0.009	1.00	0.00
ATOM 885	O	THR A	65	158.797	2.578	-0.614	1.00	0.00
ATOM 886	CB	THR A	65	160.778	3.398	1.578	1.00	0.00
ATOM 887	OG1	THR A	65	161.034	2.006	1.641	1.00	0.00
ATOM 888	CG2	THR A	65	161.415	4.039	2.791	1.00	0.00
ATOM 889	H	THR A	65	158.406	1.784	1.894	1.00	0.00
ATOM 890	HA	THR A	65	159.064	4.645	1.877	1.00	0.00
ATOM 891	HB	THR A	65	161.266	3.793	0.700	1.00	0.00
ATOM 892	HG1	THR A	65	160.910	1.618	0.773	1.00	0.00
ATOM 893	1HG2	THR A	65	162.234	3.423	3.135	1.00	0.00

ATOM 894	2HG2	THR A	65	160.681	4.133	3.577	1.00	0.00
ATOM 895	3HG2	THR A	65	161.788	5.018	2.527	1.00	0.00
ATOM 896	N	PHE A	66	158.530	4.811	-0.533	1.00	0.00
ATOM 897	CA	PHE A	66	158.103	4.921	-1.923	1.00	0.00
ATOM 898	C	PHE A	66	159.010	5.872	-2.697	1.00	0.00
ATOM 899	O	PHE A	66	159.157	7.039	-2.334	1.00	0.00
ATOM 900	CB	PHE A	66	156.655	5.406	-1.996	1.00	0.00
ATOM 901	CG	PHE A	66	155.978	5.083	-3.298	1.00	0.00
ATOM 902	CD1	PHE A	66	155.722	3.769	-3.654	1.00	0.00
ATOM 903	CD2	PHE A	66	155.598	6.094	-4.166	1.00	0.00
ATOM 904	CE1	PHE A	66	155.100	3.468	-4.851	1.00	0.00
ATOM 905	CE2	PHE A	66	154.976	5.801	-5.364	1.00	0.00
ATOM 906	CZ	PHE A	66	154.726	4.486	-5.707	1.00	0.00
ATOM 907	H	PHE A	66	158.588	5.621	0.015	1.00	0.00
ATOM 908	HA	PHE A	66	158.168	3.939	-2.369	1.00	0.00
ATOM 909	1HB	PHE A	66	156.086	4.943	-1.204	1.00	0.00
ATOM 910	2HB	PHE A	66	156.635	6.478	-1.867	1.00	0.00
ATOM 911	HD1	PHE A	66	156.014	2.973	-2.985	1.00	0.00
ATOM 912	HD2	PHE A	66	155.792	7.123	-3.898	1.00	0.00
ATOM 913	HE1	PHE A	66	154.907	2.440	-5.117	1.00	0.00
ATOM 914	HE2	PHE A	66	154.684	6.598	-6.032	1.00	0.00
ATOM 915	HZ	PHE A	66	154.240	4.254	-6.643	1.00	0.00
ATOM 916	N	ARG A	67	159.615	5.366	-3.767	1.00	0.00
ATOM 917	CA	ARG A	67	160.508	6.172	-4.592	1.00	0.00
ATOM 918	C	ARG A	67	161.689	6.684	-3.776	1.00	0.00
ATOM 919	O	ARG A	67	162.217	7.765	-4.039	1.00	0.00
ATOM 920	CB	ARG A	67	159.746	7.348	-5.204	1.00	0.00
ATOM 921	CG	ARG A	67	158.677	6.930	-6.200	1.00	0.00
ATOM 922	CD	ARG A	67	158.317	8.067	-7.143	1.00	0.00

ATOM 923	NE	ARG A	67	159.015	7.958	-8.422	1.00	0.00
ATOM 924	CZ	ARG A	67	159.160	8.970	-9.274	1.00	0.00
ATOM 925	NH1	ARG A	67	158.658	10.165	-8.989	1.00	0.00
ATOM 926	NH2	ARG A	67	159.808	8.786	-10.417	1.00	0.00
ATOM 927	H	ARG A	67	159.458	4.429	-4.006	1.00	0.00
ATOM 928	HA	ARG A	67	160.881	5.543	-5.387	1.00	0.00
ATOM 929	1HB	ARG A	67	159.271	7.906	-4.411	1.00	0.00
ATOM 930	2HB	ARG A	67	160.449	7.991	-5.714	1.00	0.00
ATOM 931	1HG	ARG A	67	159.045	6.097	-6.780	1.00	0.00
ATOM 932	2HG	ARG A	67	157.792	6.629	-5.657	1.00	0.00
ATOM 933	1HD	ARG A	67	157.253	8.045	-7.322	1.00	0.00
ATOM 934	2HD	ARG A	67	158.585	9.003	-6.675	1.00	0.00
ATOM 935	HE	ARG A	67	159.396	7.087	-8.657	1.00	0.00
ATOM 936	1HH1	ARG A	67	158.168	10.311	-8.129	1.00	0.00
ATOM 937	2HH1	ARG A	67	158.771	10.921	-9.634	1.00	0.00
ATOM 938	1HH2	ARG A	67	160.188	7.888	-10.637	1.00	0.00
ATOM 939	2HH2	ARG A	67	159.917	9.546	-11.058	1.00	0.00
ATOM 940	N	GLY A	68	162.100	5.902	-2.783	1.00	0.00
ATOM 941	CA	GLY A	68	163.216	6.295	-1.942	1.00	0.00
ATOM 942	C	GLY A	68	162.847	7.392	-0.963	1.00	0.00
ATOM 943	O	GLY A	68	163.696	8.189	-0.564	1.00	0.00
ATOM 944	H	GLY A	68	161.641	5.052	-2.619	1.00	0.00
ATOM 945	1HA	GLY A	68	163.556	5.433	-1.389	1.00	0.00
ATOM 946	2HA	GLY A	68	164.020	6.645	-2.572	1.00	0.00
ATOM 947	N	THR A	69	161.577	7.433	-0.576	1.00	0.00
ATOM 948	CA	THR A	69	161.096	8.441	0.363	1.00	0.00
ATOM 949	C	THR A	69	160.235	7.806	1.449	1.00	0.00
ATOM 950	O	THR A	69	159.141	7.310	1.178	1.00	0.00
ATOM 951	CB	THR A	69	160.297	9.515	-0.375	1.00	0.00

ATOM 952	OG1	THR A	69	160.987	9.948	-1.533	1.00	0.00
ATOM 953	CG2	THR A	69	160.010	10.737	0.472	1.00	0.00
ATOM 954	H	THR A	69	160.947	6.771	-0.928	1.00	0.00
ATOM 955	HA	THR A	69	161.957	8.900	0.825	1.00	0.00
ATOM 956	HB	THR A	69	159.349	9.096	-0.682	1.00	0.00
ATOM 957	HG1	THR A	69	161.176	9.193	-2.095	1.00	0.00
ATOM 958	1HG2	THR A	69	159.249	11.336	-0.006	1.00	0.00
ATOM 959	2HG2	THR A	69	160.913	11.319	0.579	1.00	0.00
ATOM 960	3HG2	THR A	69	159.665	10.425	1.447	1.00	0.00
ATOM 961	N	ARG A	70	160.735	7.825	2.680	1.00	0.00
ATOM 962	CA	ARG A	70	160.011	7.251	3.809	1.00	0.00
ATOM 963	C	ARG A	70	158.731	8.032	4.087	1.00	0.00
ATOM 964	O	ARG A	70	158.765	9.242	4.308	1.00	0.00
ATOM 965	CB	ARG A	70	160.897	7.239	5.057	1.00	0.00
ATOM 966	CG	ARG A	70	160.228	6.616	6.272	1.00	0.00
ATOM 967	CD	ARG A	70	160.684	7.279	7.561	1.00	0.00
ATOM 968	NE	ARG A	70	162.045	6.890	7.924	1.00	0.00
ATOM 969	CZ	ARG A	70	162.802	7.562	8.789	1.00	0.00
ATOM 970	NH1	ARG A	70	162.336	8.654	9.381	1.00	0.00
ATOM 971	NH2	ARG A	70	164.028	7.139	9.064	1.00	0.00
ATOM 972	H	ARG A	70	161.612	8.235	2.834	1.00	0.00
ATOM 973	HA	ARG A	70	159.751	6.235	3.553	1.00	0.00
ATOM 974	1HB	ARG A	70	161.795	6.681	4.842	1.00	0.00
ATOM 975	2HB	ARG A	70	161.166	8.256	5.303	1.00	0.00
ATOM 976	1HG	ARG A	70	159.158	6.731	6.180	1.00	0.00
ATOM 977	2HG	ARG A	70	160.477	5.566	6.309	1.00	0.00
ATOM 978	1HD	ARG A	70	160.650	8.351	7.431	1.00	0.00
ATOM 979	2HD	ARG A	70	160.013	6.992	8.356	1.00	0.00
ATOM 980	HE	ARG A	70	162.414	6.086	7.502	1.00	0.00



ATOM 981	1HH1	ARG A	70	161.412	8.979	9.178	1.00	0.00
ATOM 982	2HH1	ARG A	70	162.909	9.154	10.030	1.00	0.00
ATOM 983	1HH2	ARG A	70	164.384	6.316	8.621	1.00	0.00
ATOM 984	2HH2	ARG A	70	164.597	7.643	9.714	1.00	0.00
ATOM 985	N	TYR A	71	157.602	7.330	4.076	1.00	0.00
ATOM 986	CA	TYR A	71	156.310	7.957	4.327	1.00	0.00
ATOM 987	C	TYR A	71	155.770	7.560	5.696	1.00	0.00
ATOM 988	O	TYR A	71	155.270	8.400	6.446	1.00	0.00
ATOM 989	CB	TYR A	71	155.309	7.566	3.238	1.00	0.00
ATOM 990	CG	TYR A	71	155.424	8.400	1.981	1.00	0.00
ATOM 991	CD1	TYR A	71	155.529	9.784	2.050	1.00	0.00
ATOM 992	CD2	TYR A	71	155.426	7.802	0.727	1.00	0.00
ATOM 993	CE1	TYR A	71	155.635	10.548	0.905	1.00	0.00
ATOM 994	CE2	TYR A	71	155.532	8.561	-0.424	1.00	0.00
ATOM 995	CZ	TYR A	71	155.635	9.933	-0.330	1.00	0.00
ATOM 996	OH	TYR A	71	155.740	10.691	-1.473	1.00	0.00
ATOM 997	H	TYR A	71	157.639	6.368	3.893	1.00	0.00
ATOM 998	HA	TYR A	71	156.451	9.028	4.306	1.00	0.00
ATOM 999	1HB	TYR A	71	155.468	6.533	2.966	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.306	7.681	3.623	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.529	10.262	3.018	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.344	6.728	0.657	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.716	11.623	0.978	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.531	8.078	-1.390	1.00	0.00
ATOM 1005	HH	TYR A	71	156.629	10.616	-1.827	1.00	0.00
ATOM 1006	N	PHE A	72	155.873	6.274	6.017	1.00	0.00
ATOM 1007	CA	PHE A	72	155.395	5.765	7.298	1.00	0.00
ATOM 1008	C	PHE A	72	156.315	4.669	7.825	1.00	0.00
ATOM 1009	O	PHE A	72	157.106	4.095	7.077	1.00	0.00

ATOM 1010	CB	PHE A	72	153.969	5.226	7.156	1.00	0.00
ATOM 1011	CG	PHE A	72	153.833	4.157	6.110	1.00	0.00
ATOM 1012	CD1	PHE A	72	153.929	2.818	6.453	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.609	4.491	4.785	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.804	1.832	5.493	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.483	3.510	3.820	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.581	2.178	4.174	1.00	0.00
ATOM 1017	H	PHE A	72	156.281	5.653	5.379	1.00	0.00
ATOM 1018	HA	PHE A	72	155.392	6.585	8.001	1.00	0.00
ATOM 1019	1HB	PHE A	72	153.655	4.809	8.101	1.00	0.00
ATOM 1020	2HB	PHE A	72	153.311	6.039	6.890	1.00	0.00
ATOM 1021	HD1	PHE A	72	154.104	2.546	7.484	1.00	0.00
ATOM 1022	HD2	PHE A	72	153.533	5.532	4.507	1.00	0.00
ATOM 1023	HE1	PHE A	72	153.881	0.792	5.773	1.00	0.00
ATOM 1024	HE2	PHE A	72	153.309	3.784	2.789	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.483	1.410	3.423	1.00	0.00
ATOM 1026	N	THR A	73	156.207	4.384	9.119	1.00	0.00
ATOM 1027	CA	THR A	73	157.029	3.357	9.747	1.00	0.00
ATOM 1028	C	THR A	73	156.250	2.054	9.899	1.00	0.00
ATOM 1029	O	THR A	73	155.248	1.997	10.611	1.00	0.00
ATOM 1030	CB	THR A	73	157.520	3.832	11.114	1.00	0.00
ATOM 1031	OG1	THR A	73	156.507	4.562	11.785	1.00	0.00
ATOM 1032	CG2	THR A	73	158.746	4.716	11.036	1.00	0.00
ATOM 1033	H	THR A	73	155.558	4.877	9.665	1.00	0.00
ATOM 1034	HA	THR A	73	157.882	3.180	9.110	1.00	0.00
ATOM 1035	HB	THR A	73	157.771	2.969	11.716	1.00	0.00
ATOM 1036	HG1	THR A	73	156.474	4.291	12.706	1.00	0.00
ATOM 1037	1HG2	THR A	73	159.529	4.199	10.501	1.00	0.00
ATOM 1038	2HG2	THR A	73	159.086	4.949	12.034	1.00	0.00

ATOM 1039	3HG2	THR	A	73	158.498	5.630	10.517	1.00	0.00
ATOM 1040	N	CYS	A	74	156.717	1.009	9.222	1.00	0.00
ATOM 1041	CA	CYS	A	74	156.065	-0.294	9.281	1.00	0.00
ATOM 1042	C	CYS	A	74	157.095	-1.417	9.320	1.00	0.00
ATOM 1043	O	CYS	A	74	158.301	-1.169	9.289	1.00	0.00
ATOM 1044	CB	CYS	A	74	155.136	-0.478	8.080	1.00	0.00
ATOM 1045	SG	CYS	A	74	153.445	0.096	8.360	1.00	0.00
ATOM 1046	H	CYS	A	74	157.521	1.117	8.670	1.00	0.00
ATOM 1047	HA	CYS	A	74	155.478	-0.329	10.188	1.00	0.00
ATOM 1048	1HB	CYS	A	74	155.534	0.072	7.241	1.00	0.00
ATOM 1049	2HB	CYS	A	74	155.091	-1.527	7.828	1.00	0.00
ATOM 1050	HG	CYS	A	74	153.194	-0.147	9.254	1.00	0.00
ATOM 1051	N	ALA	A	75	156.613	-2.654	9.386	1.00	0.00
ATOM 1052	CA	ALA	A	75	157.492	-3.816	9.428	1.00	0.00
ATOM 1053	C	ALA	A	75	158.208	-4.011	8.096	1.00	0.00
ATOM 1054	O	ALA	A	75	157.739	-3.552	7.055	1.00	0.00
ATOM 1055	CB	ALA	A	75	156.700	-5.062	9.791	1.00	0.00
ATOM 1056	H	ALA	A	75	155.642	-2.787	9.407	1.00	0.00
ATOM 1057	HA	ALA	A	75	158.229	-3.648	10.200	1.00	0.00
ATOM 1058	1HB	ALA	A	75	157.137	-5.921	9.302	1.00	0.00
ATOM 1059	2HB	ALA	A	75	155.676	-4.945	9.467	1.00	0.00
ATOM 1060	3HB	ALA	A	75	156.725	-5.206	10.861	1.00	0.00
ATOM 1061	N	LEU	A	76	159.347	-4.695	8.137	1.00	0.00
ATOM 1062	CA	LEU	A	76	160.129	-4.952	6.933	1.00	0.00
ATOM 1063	C	LEU	A	76	159.419	-5.953	6.027	1.00	0.00
ATOM 1064	O	LEU	A	76	158.846	-6.934	6.499	1.00	0.00
ATOM 1065	CB	LEU	A	76	161.518	-5.476	7.303	1.00	0.00
ATOM 1066	CG	LEU	A	76	162.487	-4.420	7.837	1.00	0.00
ATOM 1067	CD1	LEU	A	76	163.413	-5.024	8.882	1.00	0.00

ATOM 1068	CD2	LEU A	76	163.291	-3.812	6.698	1.00	0.00
ATOM 1069	H	LEU A	76	159.669	-5.036	8.997	1.00	0.00
ATOM 1070	HA	LEU A	76	160.236	-4.017	6.402	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.401	-6.242	8.056	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.956	-5.923	6.425	1.00	0.00
ATOM 1073	HG	LEU A	76	161.923	-3.629	8.309	1.00	0.00
ATOM 1074	1HD1	LEU A	76	163.579	-6.067	8.655	1.00	0.00
ATOM 1075	2HD1	LEU A	76	162.961	-4.934	9.858	1.00	0.00
ATOM 1076	3HD1	LEU A	76	164.357	-4.499	8.873	1.00	0.00
ATOM 1077	1HD2	LEU A	76	162.802	-2.913	6.350	1.00	0.00
ATOM 1078	2HD2	LEU A	76	163.359	-4.522	5.886	1.00	0.00
ATOM 1079	3HD2	LEU A	76	164.284	-3.568	7.046	1.00	0.00
ATOM 1080	N	LYS A	77	159.463	-5.699	4.723	1.00	0.00
ATOM 1081	CA	LYS A	77	158.826	-6.579	3.751	1.00	0.00
ATOM 1082	C	LYS A	77	157.321	-6.654	3.991	1.00	0.00
ATOM 1083	O	LYS A	77	156.714	-7.719	3.867	1.00	0.00
ATOM 1084	CB	LYS A	77	159.436	-7.980	3.821	1.00	0.00
ATOM 1085	CG	LYS A	77	160.953	-7.988	3.712	1.00	0.00
ATOM 1086	CD	LYS A	77	161.411	-7.675	2.296	1.00	0.00
ATOM 1087	CE	LYS A	77	162.908	-7.415	2.240	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.667	-8.625	1.820	1.00	0.00
ATOM 1089	H	LYS A	77	159.937	-4.902	4.408	1.00	0.00
ATOM 1090	HA	LYS A	77	159.002	-6.168	2.768	1.00	0.00
ATOM 1091	1HB	LYS A	77	159.163	-8.433	4.762	1.00	0.00
ATOM 1092	2HB	LYS A	77	159.036	-8.576	3.014	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.357	-7.245	4.383	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.319	-8.966	3.991	1.00	0.00
ATOM 1095	1HD	LYS A	77	161.177	-8.513	1.658	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.888	-6.797	1.945	1.00	0.00

ATOM 1097	1HE	LYS A	77	163.096	-6.620	1.534	1.00	0.00
ATOM 1098	2HE	LYS A	77	163.244	-7.112	3.221	1.00	0.00
ATOM 1099	1HZ	LYS A	77	163.116	-9.483	2.031	1.00	0.00
ATOM 1100	2HZ	LYS A	77	164.572	-8.674	2.329	1.00	0.00
ATOM 1101	3HZ	LYS A	77	163.857	-8.590	0.798	1.00	0.00
ATOM 1102	N	LYS A	78	156.724	-5.518	4.334	1.00	0.00
ATOM 1103	CA	LYS A	78	155.290	-5.455	4.591	1.00	0.00
ATOM 1104	C	LYS A	78	154.730	-4.086	4.219	1.00	0.00
ATOM 1105	O	LYS A	78	153.888	-3.534	4.928	1.00	0.00
ATOM 1106	CB	LYS A	78	155.001	-5.755	6.063	1.00	0.00
ATOM 1107	CG	LYS A	78	155.529	-7.104	6.524	1.00	0.00
ATOM 1108	CD	LYS A	78	155.130	-7.398	7.961	1.00	0.00
ATOM 1109	CE	LYS A	78	153.930	-8.331	8.026	1.00	0.00
ATOM 1110	NZ	LYS A	78	152.998	-7.961	9.126	1.00	0.00
ATOM 1111	H	LYS A	78	157.261	-4.702	4.417	1.00	0.00
ATOM 1112	HA	LYS A	78	154.811	-6.205	3.980	1.00	0.00
ATOM 1113	1HB	LYS A	78	155.457	-4.988	6.671	1.00	0.00
ATOM 1114	2HB	LYS A	78	153.932	-5.739	6.219	1.00	0.00
ATOM 1115	1HG	LYS A	78	155.126	-7.875	5.884	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.607	-7.101	6.452	1.00	0.00
ATOM 1117	1HD	LYS A	78	155.962	-7.864	8.468	1.00	0.00
ATOM 1118	2HD	LYS A	78	154.879	-6.470	8.452	1.00	0.00
ATOM 1119	1HE	LYS A	78	153.401	-8.283	7.086	1.00	0.00
ATOM 1120	2HE	LYS A	78	154.283	-9.339	8.188	1.00	0.00
ATOM 1121	1HZ	LYS A	78	152.591	-8.817	9.553	1.00	0.00
ATOM 1122	2HZ	LYS A	78	152.225	-7.371	8.757	1.00	0.00
ATOM 1123	3HZ	LYS A	78	153.505	-7.426	9.860	1.00	0.00
ATOM 1124	N	ALA A	79	155.202	-3.543	3.101	1.00	0.00
ATOM 1125	CA	ALA A	79	154.749	-2.238	2.635	1.00	0.00

ATOM 1126 C ALA A 79 154.591 -2.223 1.118 1.00 0.00  
ATOM 1127 O ALA A 79 155.576 -2.254 0.381 1.00 0.00  
ATOM 1128 CB ALA A 79 155.718 -1.153 3.077 1.00 0.00  
ATOM 1129 H ALA A 79 155.872 -4.031 2.578 1.00 0.00  
ATOM 1130 HA ALA A 79 153.789 -2.038 3.088 1.00 0.00  
ATOM 1131 1HB ALA A 79 155.189 -0.216 3.177 1.00 0.00  
ATOM 1132 2HB ALA A 79 156.501 -1.048 2.341 1.00 0.00  
ATOM 1133 3HB ALA A 79 156.152 -1.425 4.029 1.00 0.00  
ATOM 1134 N LEU A 80 153.345 -2.174 0.658 1.00 0.00  
ATOM 1135 CA LEU A 80 153.058 -2.154 -0.771 1.00 0.00  
ATOM 1136 C LEU A 80 152.216 -0.937 -1.140 1.00 0.00  
ATOM 1137 O LEU A 80 151.022 -0.882 -0.847 1.00 0.00  
ATOM 1138 CB LEU A 80 152.330 -3.434 -1.184 1.00 0.00  
ATOM 1139 CG LEU A 80 151.917 -3.501 -2.655 1.00 0.00  
ATOM 1140 CD1 LEU A 80 153.133 -3.730 -3.540 1.00 0.00  
ATOM 1141 CD2 LEU A 80 150.885 -4.597 -2.871 1.00 0.00  
ATOM 1142 H LEU A 80 152.600 -2.151 1.295 1.00 0.00  
ATOM 1143 HA LEU A 80 153.998 -2.100 -1.298 1.00 0.00  
ATOM 1144 1HB LEU A 80 152.976 -4.275 -0.975 1.00 0.00  
ATOM 1145 2HB LEU A 80 151.439 -3.528 -0.580 1.00 0.00  
ATOM 1146 HG LEU A 80 151.471 -2.559 -2.939 1.00 0.00  
ATOM 1147 1HD1 LEU A 80 153.887 -4.268 -2.984 1.00 0.00  
ATOM 1148 2HD1 LEU A 80 153.531 -2.777 -3.858 1.00 0.00  
ATOM 1149 3HD1 LEU A 80 152.845 -4.307 -4.407 1.00 0.00  
ATOM 1150 1HD2 LEU A 80 149.893 -4.181 -2.770 1.00 0.00  
ATOM 1151 2HD2 LEU A 80 151.027 -5.374 -2.134 1.00 0.00  
ATOM 1152 3HD2 LEU A 80 151.002 -5.012 -3.860 1.00 0.00  
ATOM 1153 N PHE A 81 152.848 0.039 -1.786 1.00 0.00  
ATOM 1154 CA PHE A 81 152.157 1.256 -2.195 1.00 0.00

ATOM 1155 C PHE A 81 151.307 1.009 -3.437 1.00 0.00  
ATOM 1156 O PHE A 81 151.705 0.267 -4.335 1.00 0.00  
ATOM 1157 CB PHE A 81 153.167 2.373 -2.469 1.00 0.00  
ATOM 1158 CG PHE A 81 153.932 2.803 -1.249 1.00 0.00  
ATOM 1159 CD1 PHE A 81 153.577 3.955 -0.564 1.00 0.00  
ATOM 1160 CD2 PHE A 81 155.004 2.057 -0.788 1.00 0.00  
ATOM 1161 CE1 PHE A 81 154.278 4.354 0.558 1.00 0.00  
ATOM 1162 CE2 PHE A 81 155.708 2.451 0.334 1.00 0.00  
ATOM 1163 CZ PHE A 81 155.345 3.600 1.008 1.00 0.00  
ATOM 1164 H PHE A 81 153.800 -0.062 -1.991 1.00 0.00  
ATOM 1165 HA PHE A 81 151.511 1.559 -1.385 1.00 0.00  
ATOM 1166 1HB PHE A 81 153.881 2.030 -3.203 1.00 0.00  
ATOM 1167 2HB PHE A 81 152.644 3.235 -2.856 1.00 0.00  
ATOM 1168 HD1 PHE A 81 152.742 4.544 -0.915 1.00 0.00  
ATOM 1169 HD2 PHE A 81 155.289 1.158 -1.315 1.00 0.00  
ATOM 1170 HE1 PHE A 81 153.992 5.253 1.082 1.00 0.00  
ATOM 1171 HE2 PHE A 81 156.543 1.860 0.683 1.00 0.00  
ATOM 1172 HZ PHE A 81 155.895 3.910 1.884 1.00 0.00  
ATOM 1173 N VAL A 82 150.136 1.635 -3.480 1.00 0.00  
ATOM 1174 CA VAL A 82 149.229 1.481 -4.612 1.00 0.00  
ATOM 1175 C VAL A 82 148.290 2.677 -4.731 1.00 0.00  
ATOM 1176 O VAL A 82 148.185 3.490 -3.813 1.00 0.00  
ATOM 1177 CB VAL A 82 148.392 0.195 -4.492 1.00 0.00  
ATOM 1178 CG1 VAL A 82 149.267 -1.034 -4.677 1.00 0.00  
ATOM 1179 CG2 VAL A 82 147.673 0.150 -3.151 1.00 0.00  
ATOM 1180 H VAL A 82 149.874 2.213 -2.734 1.00 0.00  
ATOM 1181 HA VAL A 82 149.826 1.414 -5.510 1.00 0.00  
ATOM 1182 HB VAL A 82 147.648 0.200 -5.274 1.00 0.00  
ATOM 1183 1HG1 VAL A 82 149.980 -1.095 -3.866 1.00 0.00

ATOM 1184 2HG1 VAL A 82 149.796 -0.961 -5.616 1.00 0.00  
ATOM 1185 3HG1 VAL A 82 148.650 -1.920 -4.680 1.00 0.00  
ATOM 1186 1HG2 VAL A 82 146.739 -0.382 -3.261 1.00 0.00  
ATOM 1187 2HG2 VAL A 82 147.476 1.157 -2.815 1.00 0.00  
ATOM 1188 3HG2 VAL A 82 148.293 -0.357 -2.428 1.00 0.00  
ATOM 1189 N LYS A 83 147.610 2.775 -5.868 1.00 0.00  
ATOM 1190 CA LYS A 83 146.677 3.871 -6.108 1.00 0.00  
ATOM 1191 C LYS A 83 145.454 3.754 -5.206 1.00 0.00  
ATOM 1192 O LYS A 83 144.760 2.738 -5.212 1.00 0.00  
ATOM 1193 CB LYS A 83 146.244 3.888 -7.574 1.00 0.00  
ATOM 1194 CG LYS A 83 147.383 4.164 -8.542 1.00 0.00  
ATOM 1195 CD LYS A 83 147.037 3.716 -9.953 1.00 0.00  
ATOM 1196 CE LYS A 83 147.527 4.712 -10.991 1.00 0.00  
ATOM 1197 NZ LYS A 83 147.970 4.039 -12.243 1.00 0.00  
ATOM 1198 H LYS A 83 147.736 2.095 -6.562 1.00 0.00  
ATOM 1199 HA LYS A 83 147.188 4.796 -5.882 1.00 0.00  
ATOM 1200 1HB LYS A 83 145.815 2.929 -7.822 1.00 0.00  
ATOM 1201 2HB LYS A 83 145.494 4.653 -7.708 1.00 0.00  
ATOM 1202 1HG LYS A 83 147.585 5.225 -8.552 1.00 0.00  
ATOM 1203 2HG LYS A 83 148.262 3.631 -8.210 1.00 0.00  
ATOM 1204 1HD LYS A 83 147.501 2.760 -10.141 1.00 0.00  
ATOM 1205 2HD LYS A 83 145.964 3.620 -10.037 1.00 0.00  
ATOM 1206 1HE LYS A 83 146.723 5.394 -11.225 1.00 0.00  
ATOM 1207 2HE LYS A 83 148.356 5.266 -10.576 1.00 0.00  
ATOM 1208 1HZ LYS A 83 147.466 3.137 -12.361 1.00 0.00  
ATOM 1209 2HZ LYS A 83 148.992 3.849 -12.204 1.00 0.00  
ATOM 1210 3HZ LYS A 83 147.773 4.646 -13.064 1.00 0.00  
ATOM 1211 N LEU A 84 145.197 4.803 -4.432 1.00 0.00  
ATOM 1212 CA LEU A 84 144.059 4.823 -3.523 1.00 0.00



ATOM 1213	C	LEU A	84	142.750	4.654	-4.288	1.00	0.00
ATOM 1214	O	LEU A	84	141.796	4.062	-3.782	1.00	0.00
ATOM 1215	CB	LEU A	84	144.039	6.133	-2.733	1.00	0.00
ATOM 1216	CG	LEU A	84	142.825	6.326	-1.822	1.00	0.00
ATOM 1217	CD1	LEU A	84	142.924	5.419	-0.605	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.705	7.781	-1.396	1.00	0.00
ATOM 1219	H	LEU A	84	145.789	5.582	-4.474	1.00	0.00
ATOM 1220	HA	LEU A	84	144.169	3.999	-2.834	1.00	0.00
ATOM 1221	1HB	LEU A	84	144.931	6.175	-2.125	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.066	6.952	-3.437	1.00	0.00
ATOM 1223	HG	LEU A	84	141.930	6.059	-2.365	1.00	0.00
ATOM 1224	1HD1	LEU A	84	141.946	5.308	-0.159	1.00	0.00
ATOM 1225	2HD1	LEU A	84	143.600	5.855	0.115	1.00	0.00
ATOM 1226	3HD1	LEU A	84	143.294	4.450	-0.906	1.00	0.00
ATOM 1227	1HD2	LEU A	84	143.646	8.115	-0.986	1.00	0.00
ATOM 1228	2HD2	LEU A	84	141.931	7.874	-0.648	1.00	0.00
ATOM 1229	3HD2	LEU A	84	142.451	8.386	-2.254	1.00	0.00
ATOM 1230	N	LYS A	85	142.712	5.177	-5.508	1.00	0.00
ATOM 1231	CA	LYS A	85	141.521	5.083	-6.343	1.00	0.00
ATOM 1232	C	LYS A	85	141.210	3.630	-6.689	1.00	0.00
ATOM 1233	O	LYS A	85	140.057	3.274	-6.936	1.00	0.00
ATOM 1234	CB	LYS A	85	141.707	5.896	-7.627	1.00	0.00
ATOM 1235	CG	LYS A	85	143.008	5.597	-8.352	1.00	0.00
ATOM 1236	CD	LYS A	85	142.945	6.026	-9.810	1.00	0.00
ATOM 1237	CE	LYS A	85	142.666	4.847	-10.728	1.00	0.00
ATOM 1238	NZ	LYS A	85	143.868	4.463	-11.521	1.00	0.00
ATOM 1239	H	LYS A	85	143.505	5.637	-5.856	1.00	0.00
ATOM 1240	HA	LYS A	85	140.693	5.494	-5.786	1.00	0.00
ATOM 1241	1HB	LYS A	85	140.888	5.681	-8.297	1.00	0.00

ATOM 1242	2HB	LYS A	85	141.691	6.947	-7.379	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.811	6.131	-7.866	1.00	0.00
ATOM 1244	2HG	LYS A	85	143.200	4.535	-8.307	1.00	0.00
ATOM 1245	1HD	LYS A	85	142.156	6.754	-9.927	1.00	0.00
ATOM 1246	2HD	LYS A	85	143.890	6.470	-10.086	1.00	0.00
ATOM 1247	1HE	LYS A	85	142.358	4.003	-10.129	1.00	0.00
ATOM 1248	2HE	LYS A	85	141.869	5.116	-11.406	1.00	0.00
ATOM 1249	1HZ	LYS A	85	143.929	3.427	-11.599	1.00	0.00
ATOM 1250	2HZ	LYS A	85	144.729	4.815	-11.058	1.00	0.00
ATOM 1251	3HZ	LYS A	85	143.810	4.869	-12.477	1.00	0.00
ATOM 1252	N	SER A	86	142.243	2.794	-6.705	1.00	0.00
ATOM 1253	CA	SER A	86	142.077	1.380	-7.019	1.00	0.00
ATOM 1254	C	SER A	86	142.051	0.539	-5.747	1.00	0.00
ATOM 1255	O	SER A	86	142.486	-0.613	-5.743	1.00	0.00
ATOM 1256	CB	SER A	86	143.205	0.904	-7.936	1.00	0.00
ATOM 1257	OG	SER A	86	143.371	1.779	-9.038	1.00	0.00
ATOM 1258	H	SER A	86	143.139	3.136	-6.500	1.00	0.00
ATOM 1259	HA	SER A	86	141.134	1.264	-7.533	1.00	0.00
ATOM 1260	1HB	SER A	86	144.128	0.869	-7.378	1.00	0.00
ATOM 1261	2HB	SER A	86	142.972	-0.083	-8.308	1.00	0.00
ATOM 1262	HG	SER A	86	142.512	1.998	-9.406	1.00	0.00
ATOM 1263	N	CYS A	87	141.537	1.122	-4.669	1.00	0.00
ATOM 1264	CA	CYS A	87	141.454	0.427	-3.390	1.00	0.00
ATOM 1265	C	CYS A	87	140.001	0.231	-2.970	1.00	0.00
ATOM 1266	O	CYS A	87	139.186	1.148	-3.073	1.00	0.00
ATOM 1267	CB	CYS A	87	142.207	1.208	-2.311	1.00	0.00
ATOM 1268	SG	CYS A	87	144.005	1.180	-2.501	1.00	0.00
ATOM 1269	H	CYS A	87	141.206	2.042	-4.735	1.00	0.00
ATOM 1270	HA	CYS A	87	141.916	-0.542	-3.508	1.00	0.00

ATOM 1271	1HB	CYS A	87	141.891	2.239	-2.337	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.972	0.788	-1.344	1.00	0.00
ATOM 1273	HG	CYS A	87	144.394	1.095	-1.627	1.00	0.00
ATOM 1274	N	ARG A	88	139.683	-0.971	-2.498	1.00	0.00
ATOM 1275	CA	ARG A	88	138.328	-1.288	-2.063	1.00	0.00
ATOM 1276	C	ARG A	88	138.292	-1.575	-0.563	1.00	0.00
ATOM 1277	O	ARG A	88	139.234	-2.142	-0.010	1.00	0.00
ATOM 1278	CB	ARG A	88	137.790	-2.492	-2.839	1.00	0.00
ATOM 1279	CG	ARG A	88	136.954	-2.109	-4.051	1.00	0.00
ATOM 1280	CD	ARG A	88	135.509	-2.558	-3.902	1.00	0.00
ATOM 1281	NE	ARG A	88	135.240	-3.791	-4.638	1.00	0.00
ATOM 1282	CZ	ARG A	88	134.146	-4.531	-4.470	1.00	0.00
ATOM 1283	NH1	ARG A	88	133.219	-4.168	-3.594	1.00	0.00
ATOM 1284	NH2	ARG A	88	133.980	-5.638	-5.181	1.00	0.00
ATOM 1285	H	ARG A	88	140.377	-1.660	-2.441	1.00	0.00
ATOM 1286	HA	ARG A	88	137.706	-0.430	-2.269	1.00	0.00
ATOM 1287	1HB	ARG A	88	138.623	-3.088	-3.178	1.00	0.00
ATOM 1288	2HB	ARG A	88	137.176	-3.087	-2.178	1.00	0.00
ATOM 1289	1HG	ARG A	88	136.976	-1.035	-4.167	1.00	0.00
ATOM 1290	2HG	ARG A	88	137.378	-2.575	-4.929	1.00	0.00
ATOM 1291	1HD	ARG A	88	135.304	-2.724	-2.854	1.00	0.00
ATOM 1292	2HD	ARG A	88	134.862	-1.778	-4.275	1.00	0.00
ATOM 1293	HE	ARG A	88	135.910	-4.082	-5.292	1.00	0.00
ATOM 1294	1HH1	ARG A	88	133.338	-3.334	-3.054	1.00	0.00
ATOM 1295	2HH1	ARG A	88	132.399	-4.728	-3.472	1.00	0.00
ATOM 1296	1HH2	ARG A	88	134.676	-5.917	-5.843	1.00	0.00
ATOM 1297	2HH2	ARG A	88	133.159	-6.194	-5.055	1.00	0.00
ATOM 1298	N	PRO A	89	137.198	-1.187	0.118	1.00	0.00
ATOM 1299	CA	PRO A	89	137.048	-1.408	1.560	1.00	0.00

ATOM 1300	C	PRO A	89	137.285	-2.863	1.950	1.00	0.00
ATOM 1301	O	PRO A	89	136.808	-3.781	1.282	1.00	0.00
ATOM 1302	CB	PRO A	89	135.594	-1.013	1.832	1.00	0.00
ATOM 1303	CG	PRO A	89	135.252	-0.054	0.744	1.00	0.00
ATOM 1304	CD	PRO A	89	136.026	-0.505	-0.463	1.00	0.00
ATOM 1305	HA	PRO A	89	137.710	-0.771	2.128	1.00	0.00
ATOM 1306	1HB	PRO A	89	134.967	-1.892	1.797	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.520	-0.549	2.803	1.00	0.00
ATOM 1308	1HG	PRO A	89	134.191	-0.090	0.545	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.548	0.945	1.028	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.436	-1.189	-1.056	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.329	0.346	-1.055	1.00	0.00
ATOM 1312	N	ASP A	90	138.026	-3.066	3.035	1.00	0.00
ATOM 1313	CA	ASP A	90	138.326	-4.409	3.514	1.00	0.00
ATOM 1314	C	ASP A	90	137.405	-4.795	4.667	1.00	0.00
ATOM 1315	O	ASP A	90	137.387	-4.137	5.706	1.00	0.00
ATOM 1316	CB	ASP A	90	139.786	-4.499	3.961	1.00	0.00
ATOM 1317	CG	ASP A	90	140.288	-5.929	4.013	1.00	0.00
ATOM 1318	OD1	ASP A	90	139.463	-6.840	4.238	1.00	0.00
ATOM 1319	OD2	ASP A	90	141.506	-6.138	3.828	1.00	0.00
ATOM 1320	H	ASP A	90	138.378	-2.294	3.525	1.00	0.00
ATOM 1321	HA	ASP A	90	138.167	-5.097	2.696	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.403	-3.947	3.268	1.00	0.00
ATOM 1323	2HB	ASP A	90	139.881	-4.067	4.946	1.00	0.00
ATOM 1324	N	SER A	91	136.640	-5.865	4.475	1.00	0.00
ATOM 1325	CA	SER A	91	135.716	-6.338	5.498	1.00	0.00
ATOM 1326	C	SER A	91	136.321	-7.495	6.286	1.00	0.00
ATOM 1327	O	SER A	91	135.606	-8.375	6.764	1.00	0.00
ATOM 1328	CB	SER A	91	134.396	-6.776	4.860	1.00	0.00

ATOM 1329	OG	SER A	91	133.310	-6.584	5.749	1.00	0.00
ATOM 1330	H	SER A	91	136.699	-6.348	3.624	1.00	0.00
ATOM 1331	HA	SER A	91	135.523	-5.519	6.175	1.00	0.00
ATOM 1332	1HB	SER A	91	134.221	-6.196	3.966	1.00	0.00
ATOM 1333	2HB	SER A	91	134.454	-7.824	4.603	1.00	0.00
ATOM 1334	HG	SER A	91	133.107	-7.412	6.191	1.00	0.00
ATOM 1335	N	ARG A	92	137.643	-7.487	6.418	1.00	0.00
ATOM 1336	CA	ARG A	92	138.345	-8.536	7.149	1.00	0.00
ATOM 1337	C	ARG A	92	137.999	-8.490	8.633	1.00	0.00
ATOM 1338	O	ARG A	92	137.991	-9.519	9.310	1.00	0.00
ATOM 1339	CB	ARG A	92	139.856	-8.395	6.960	1.00	0.00
ATOM 1340	CG	ARG A	92	140.387	-9.117	5.733	1.00	0.00
ATOM 1341	CD	ARG A	92	140.922	-10.495	6.085	1.00	0.00
ATOM 1342	NE	ARG A	92	139.849	-11.470	6.267	1.00	0.00
ATOM 1343	CZ	ARG A	92	140.030	-12.682	6.784	1.00	0.00
ATOM 1344	NH1	ARG A	92	141.238	-13.075	7.169	1.00	0.00
ATOM 1345	NH2	ARG A	92	138.999	-13.508	6.915	1.00	0.00
ATOM 1346	H	ARG A	92	138.160	-6.758	6.014	1.00	0.00
ATOM 1347	HA	ARG A	92	138.029	-9.488	6.747	1.00	0.00
ATOM 1348	1HB	ARG A	92	140.099	-7.347	6.869	1.00	0.00
ATOM 1349	2HB	ARG A	92	140.355	-8.796	7.831	1.00	0.00
ATOM 1350	1HG	ARG A	92	139.586	-9.225	5.016	1.00	0.00
ATOM 1351	2HG	ARG A	92	141.183	-8.530	5.299	1.00	0.00
ATOM 1352	1HD	ARG A	92	141.568	-10.830	5.287	1.00	0.00
ATOM 1353	2HD	ARG A	92	141.491	-10.423	7.001	1.00	0.00
ATOM 1354	HE	ARG A	92	138.947	-11.206	5.990	1.00	0.00
ATOM 1355	1HH1	ARG A	92	142.019	-12.458	7.074	1.00	0.00
ATOM 1356	2HH1	ARG A	92	141.367	-13.988	7.557	1.00	0.00
ATOM 1357	1HH2	ARG A	92	138.087	-13.217	6.626	1.00	0.00

ATOM 1358	2HH2	ARG	A	92	139.135	-14.418	7.303	1.00	0.00
ATOM 1359	N	PHE	A	93	137.713	-7.293	9.133	1.00	0.00
ATOM 1360	CA	PHE	A	93	137.366	-7.114	10.538	1.00	0.00
ATOM 1361	C	PHE	A	93	136.006	-6.439	10.683	1.00	0.00
ATOM 1362	O	PHE	A	93	135.761	-5.713	11.646	1.00	0.00
ATOM 1363	CB	PHE	A	93	138.437	-6.284	11.248	1.00	0.00
ATOM 1364	CG	PHE	A	93	139.732	-7.019	11.447	1.00	0.00
ATOM 1365	CD1	PHE	A	93	140.508	-7.389	10.360	1.00	0.00
ATOM 1366	CD2	PHE	A	93	140.173	-7.340	12.721	1.00	0.00
ATOM 1367	CE1	PHE	A	93	141.701	-8.064	10.540	1.00	0.00
ATOM 1368	CE2	PHE	A	93	141.365	-8.015	12.907	1.00	0.00
ATOM 1369	CZ	PHE	A	93	142.129	-8.378	11.815	1.00	0.00
ATOM 1370	H	PHE	A	93	137.736	-6.511	8.543	1.00	0.00
ATOM 1371	HA	PHE	A	93	137.320	-8.091	10.995	1.00	0.00
ATOM 1372	1HB	PHE	A	93	138.644	-5.400	10.663	1.00	0.00
ATOM 1373	2HB	PHE	A	93	138.069	-5.989	12.219	1.00	0.00
ATOM 1374	HD1	PHE	A	93	140.174	-7.143	9.362	1.00	0.00
ATOM 1375	HD2	PHE	A	93	139.576	-7.057	13.575	1.00	0.00
ATOM 1376	HE1	PHE	A	93	142.296	-8.347	9.684	1.00	0.00
ATOM 1377	HE2	PHE	A	93	141.697	-8.260	13.905	1.00	0.00
ATOM 1378	HZ	PHE	A	93	143.060	-8.906	11.957	1.00	0.00
ATOM 1379	N	ALA	A	94	135.123	-6.684	9.719	1.00	0.00
ATOM 1380	CA	ALA	A	94	133.788	-6.099	9.741	1.00	0.00
ATOM 1381	C	ALA	A	94	132.772	-7.072	10.327	1.00	0.00
ATOM 1382	O	ALA	A	94	132.691	-8.228	9.909	1.00	0.00
ATOM 1383	CB	ALA	A	94	133.373	-5.682	8.337	1.00	0.00
ATOM 1384	H	ALA	A	94	135.376	-7.271	8.976	1.00	0.00
ATOM 1385	HA	ALA	A	94	133.822	-5.214	10.358	1.00	0.00
ATOM 1386	1HB	ALA	A	94	134.251	-5.568	7.721	1.00	0.00

ATOM 1387	2HB	ALA A	94	132.841	-4.743	8.384	1.00	0.00
ATOM 1388	3HB	ALA A	94	132.730	-6.439	7.913	1.00	0.00
ATOM 1389	N	SER A	95	131.999	-6.600	11.299	1.00	0.00
ATOM 1390	CA	SER A	95	130.987	-7.428	11.944	1.00	0.00
ATOM 1391	C	SER A	95	129.662	-7.353	11.194	1.00	0.00
ATOM 1392	O	SER A	95	129.017	-6.305	11.158	1.00	0.00
ATOM 1393	CB	SER A	95	130.791	-6.992	13.397	1.00	0.00
ATOM 1394	OG	SER A	95	130.890	-5.584	13.525	1.00	0.00
ATOM 1395	H	SER A	95	132.110	-5.670	11.589	1.00	0.00
ATOM 1396	HA	SER A	95	131.338	-8.450	11.928	1.00	0.00
ATOM 1397	1HB	SER A	95	129.814	-7.304	13.735	1.00	0.00
ATOM 1398	2HB	SER A	95	131.549	-7.453	14.013	1.00	0.00
ATOM 1399	HG	SER A	95	130.226	-5.272	14.144	1.00	0.00
ATOM 1400	N	LEU A	96	129.260	-8.471	10.598	1.00	0.00
ATOM 1401	CA	LEU A	96	128.010	-8.531	9.849	1.00	0.00
ATOM 1402	C	LEU A	96	127.168	-9.724	10.295	1.00	0.00
ATOM 1403	O	LEU A	96	126.898	-10.636	9.512	1.00	0.00
ATOM 1404	CB	LEU A	96	128.294	-8.620	8.348	1.00	0.00
ATOM 1405	CG	LEU A	96	128.449	-7.275	7.638	1.00	0.00
ATOM 1406	CD1	LEU A	96	129.872	-6.756	7.782	1.00	0.00
ATOM 1407	CD2	LEU A	96	128.074	-7.403	6.170	1.00	0.00
ATOM 1408	H	LEU A	96	129.818	-9.273	10.663	1.00	0.00
ATOM 1409	HA	LEU A	96	127.459	-7.624	10.049	1.00	0.00
ATOM 1410	1HB	LEU A	96	129.204	-9.186	8.209	1.00	0.00
ATOM 1411	2HB	LEU A	96	127.483	-9.158	7.881	1.00	0.00
ATOM 1412	HG	LEU A	96	127.785	-6.556	8.093	1.00	0.00
ATOM 1413	1HD1	LEU A	96	130.148	-6.210	6.893	1.00	0.00
ATOM 1414	2HD1	LEU A	96	130.546	-7.589	7.917	1.00	0.00
ATOM 1415	3HD1	LEU A	96	129.932	-6.102	8.639	1.00	0.00

ATOM 1416	1HD2	LEU A	96	128.564	-6.626	5.603	1.00	0.00
ATOM 1417	2HD2	LEU A	96	127.003	-7.305	6.063	1.00	0.00
ATOM 1418	3HD2	LEU A	96	128.385	-8.368	5.800	1.00	0.00
ATOM 1419	N	GLN A	97	126.757	-9.711	11.559	1.00	0.00
ATOM 1420	CA	GLN A	97	125.947	-10.790	12.110	1.00	0.00
ATOM 1421	C	GLN A	97	124.516	-10.728	11.576	1.00	0.00
ATOM 1422	O	GLN A	97	124.045	-11.665	10.932	1.00	0.00
ATOM 1423	CB	GLN A	97	125.941	-10.721	13.640	1.00	0.00
ATOM 1424	CG	GLN A	97	126.526	-11.955	14.306	1.00	0.00
ATOM 1425	CD	GLN A	97	127.328	-11.623	15.549	1.00	0.00
ATOM 1426	OE1	GLN A	97	128.215	-10.768	15.519	1.00	0.00
ATOM 1427	NE2	GLN A	97	127.020	-12.297	16.650	1.00	0.00
ATOM 1428	H	GLN A	97	127.004	-8.958	12.134	1.00	0.00
ATOM 1429	HA	GLN A	97	126.390	-11.726	11.804	1.00	0.00
ATOM 1430	1HB	GLN A	97	126.519	-9.863	13.952	1.00	0.00
ATOM 1431	2HB	GLN A	97	124.924	-10.602	13.982	1.00	0.00
ATOM 1432	1HG	GLN A	97	125.719	-12.616	14.585	1.00	0.00
ATOM 1433	2HG	GLN A	97	127.173	-12.457	13.601	1.00	0.00
ATOM 1434	1HE2	GLN A	97	126.303	-12.963	16.600	1.00	0.00
ATOM 1435	2HE2	GLN A	97	127.523	-12.101	17.468	1.00	0.00
ATOM 1436	N	PRO A	98	123.805	-9.618	11.839	1.00	0.00
ATOM 1437	CA	PRO A	98	122.423	-9.441	11.383	1.00	0.00
ATOM 1438	C	PRO A	98	122.336	-9.185	9.882	1.00	0.00
ATOM 1439	O	PRO A	98	121.504	-9.772	9.190	1.00	0.00
ATOM 1440	CB	PRO A	98	121.948	-8.215	12.163	1.00	0.00
ATOM 1441	CG	PRO A	98	123.189	-7.437	12.434	1.00	0.00
ATOM 1442	CD	PRO A	98	124.289	-8.450	12.603	1.00	0.00
ATOM 1443	HA	PRO A	98	121.811	-10.293	11.637	1.00	0.00
ATOM 1444	1HB	PRO A	98	121.251	-7.650	11.562	1.00	0.00



ATOM 1445	2HB	PRO A	98	121.472	-8.530	13.079	1.00	0.00
ATOM 1446	1HG	PRO A	98	123.404	-6.786	11.600	1.00	0.00
ATOM 1447	2HG	PRO A	98	123.070	-6.861	13.341	1.00	0.00
ATOM 1448	1HD	PRO A	98	125.213	-8.076	12.188	1.00	0.00
ATOM 1449	2HD	PRO A	98	124.416	-8.700	13.646	1.00	0.00
ATOM 1450	N	SER A	99	123.200	-8.306	9.385	1.00	0.00
ATOM 1451	CA	SER A	99	123.219	-7.974	7.965	1.00	0.00
ATOM 1452	C	SER A	99	121.874	-7.407	7.521	1.00	0.00
ATOM 1453	O	SER A	99	121.020	-7.091	8.348	1.00	0.00
ATOM 1454	CB	SER A	99	123.566	-9.211	7.134	1.00	0.00
ATOM 1455	OG	SER A	99	124.331	-8.862	5.994	1.00	0.00
ATOM 1456	H	SER A	99	123.840	-7.871	9.986	1.00	0.00
ATOM 1457	HA	SER A	99	123.981	-7.223	7.811	1.00	0.00
ATOM 1458	1HB	SER A	99	124.136	-9.899	7.738	1.00	0.00
ATOM 1459	2HB	SER A	99	122.654	-9.689	6.808	1.00	0.00
ATOM 1460	HG	SER A	99	124.982	-9.547	5.823	1.00	0.00
ATOM 1461	N	GLY A	100	121.693	-7.282	6.210	1.00	0.00
ATOM 1462	CA	GLY A	100	120.450	-6.753	5.680	1.00	0.00
ATOM 1463	C	GLY A	100	119.356	-7.803	5.611	1.00	0.00
ATOM 1464	O	GLY A	100	119.639	-8.982	5.399	1.00	0.00
ATOM 1465	H	GLY A	100	122.411	-7.550	5.597	1.00	0.00
ATOM 1466	1HA	GLY A	100	120.118	-5.944	6.312	1.00	0.00
ATOM 1467	2HA	GLY A	100	120.628	-6.370	4.686	1.00	0.00
ATOM 1468	N	PRO A	101	118.085	-7.404	5.789	1.00	0.00
ATOM 1469	CA	PRO A	101	116.952	-8.333	5.743	1.00	0.00
ATOM 1470	C	PRO A	101	116.660	-8.821	4.328	1.00	0.00
ATOM 1471	O	PRO A	101	116.427	-8.023	3.421	1.00	0.00
ATOM 1472	CB	PRO A	101	115.786	-7.494	6.269	1.00	0.00
ATOM 1473	CG	PRO A	101	116.154	-6.088	5.942	1.00	0.00

ATOM 1474	CD	PRO A 101	117.653	-6.016	6.049	1.00	0.00
ATOM 1475	HA	PRO A 101	117.110	-9.182	6.391	1.00	0.00
ATOM 1476	1HB	PRO A 101	114.873	-7.791	5.773	1.00	0.00
ATOM 1477	2HB	PRO A 101	115.686	-7.638	7.335	1.00	0.00
ATOM 1478	1HG	PRO A 101	115.838	-5.850	4.937	1.00	0.00
ATOM 1479	2HG	PRO A 101	115.696	-5.414	6.650	1.00	0.00
ATOM 1480	1HD	PRO A 101	118.052	-5.343	5.304	1.00	0.00
ATOM 1481	2HD	PRO A 101	117.947	-5.701	7.039	1.00	0.00
ATOM 1482	N	SER A 102	116.674	-10.138	4.148	1.00	0.00
ATOM 1483	CA	SER A 102	116.412	-10.733	2.842	1.00	0.00
ATOM 1484	C	SER A 102	116.109	-12.222	2.974	1.00	0.00
ATOM 1485	O	SER A 102	114.991	-12.664	2.712	1.00	0.00
ATOM 1486	CB	SER A 102	117.608	-10.524	1.913	1.00	0.00
ATOM 1487	OG	SER A 102	118.116	-9.206	2.023	1.00	0.00
ATOM 1488	H	SER A 102	116.867	-10.723	4.910	1.00	0.00
ATOM 1489	HA	SER A 102	115.549	-10.239	2.421	1.00	0.00
ATOM 1490	1HB	SER A 102	118.391	-11.220	2.174	1.00	0.00
ATOM 1491	2HB	SER A 102	117.301	-10.695	0.891	1.00	0.00
ATOM 1492	HG	SER A 102	117.394	-8.577	1.950	1.00	0.00
ATOM 1493	N	SER A 103	117.113	-12.991	3.383	1.00	0.00
ATOM 1494	CA	SER A 103	116.954	-14.431	3.549	1.00	0.00
ATOM 1495	C	SER A 103	116.257	-14.753	4.867	1.00	0.00
ATOM 1496	O	SER A 103	115.461	-15.689	4.948	1.00	0.00
ATOM 1497	CB	SER A 103	118.316	-15.125	3.496	1.00	0.00
ATOM 1498	OG	SER A 103	119.347	-14.261	3.943	1.00	0.00
ATOM 1499	H	SER A 103	117.982	-12.580	3.576	1.00	0.00
ATOM 1500	HA	SER A 103	116.344	-14.793	2.735	1.00	0.00
ATOM 1501	1HB	SER A 103	118.297	-15.999	4.129	1.00	0.00
ATOM 1502	2HB	SER A 103	118.528	-15.422	2.480	1.00	0.00

ATOM 1503 HG SER A 103 119.084 -13.850 4.770 1.00 0.00  
ATOM 1504 N GLY A 104 116.563 -13.971 5.898 1.00 0.00  
ATOM 1505 CA GLY A 104 115.957 -14.190 7.198 1.00 0.00  
ATOM 1506 C GLY A 104 116.797 -13.632 8.330 1.00 0.00  
ATOM 1507 O GLY A 104 116.544 -12.483 8.749 1.00 0.00  
ATOM 1508 OXT GLY A 104 117.710 -14.346 8.800 1.00 0.00  
ATOM 1509 H GLY A 104 117.204 -13.241 5.775 1.00 0.00  
ATOM 1510 1HA GLY A 104 114.988 -13.713 7.216 1.00 0.00  
ATOM 1511 2HA GLY A 104 115.828 -15.251 7.349 1.00 0.00  
TER 1512 GLY A 104  
ENDMDL

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## 立体構造座標表 4

ATOM 1 N GLY A 1 121.720 20.634 -14.920 1.00 0.00  
ATOM 2 CA GLY A 1 122.817 20.620 -15.926 1.00 0.00  
ATOM 3 C GLY A 1 124.008 19.798 -15.473 1.00 0.00  
ATOM 4 O GLY A 1 124.328 18.773 -16.074 1.00 0.00  
ATOM 5 1H GLY A 1 121.802 19.811 -14.289 1.00 0.00  
ATOM 6 2H GLY A 1 120.797 20.600 -15.398 1.00 0.00  
ATOM 7 3H GLY A 1 121.770 21.502 -14.350 1.00 0.00  
ATOM 8 1HA GLY A 1 122.439 20.205 -16.849 1.00 0.00  
ATOM 9 2HA GLY A 1 123.140 21.634 -16.106 1.00 0.00  
ATOM 10 N SER A 2 124.667 20.251 -14.411 1.00 0.00  
ATOM 11 CA SER A 2 125.830 19.552 -13.878 1.00 0.00  
ATOM 12 C SER A 2 125.464 18.765 -12.623 1.00 0.00  
ATOM 13 O SER A 2 126.259 18.661 -11.690 1.00 0.00  
ATOM 14 CB SER A 2 126.948 20.547 -13.561 1.00 0.00  
ATOM 15 OG SER A 2 126.520 21.513 -12.617 1.00 0.00

ATOM 16	H	SER A	2	124.363	21.075	-13.976	1.00	0.00
ATOM 17	HA	SER A	2	126.177	18.862	-14.633	1.00	0.00
ATOM 18	1HB	SER A	2	127.796	20.015	-13.156	1.00	0.00
ATOM 19	2HB	SER A	2	127.243	21.054	-14.469	1.00	0.00
ATOM 20	HG	SER A	2	126.598	22.391	-12.998	1.00	0.00
ATOM 21	N	SER A	3	124.255	18.213	-12.610	1.00	0.00
ATOM 22	CA	SER A	3	123.782	17.436	-11.469	1.00	0.00
ATOM 23	C	SER A	3	123.253	16.078	-11.920	1.00	0.00
ATOM 24	O	SER A	3	123.214	15.780	-13.113	1.00	0.00
ATOM 25	CB	SER A	3	122.690	18.201	-10.721	1.00	0.00
ATOM 26	OG	SER A	3	122.954	19.592	-10.713	1.00	0.00
ATOM 27	H	SER A	3	123.666	18.332	-13.384	1.00	0.00
ATOM 28	HA	SER A	3	124.619	17.280	-10.805	1.00	0.00
ATOM 29	1HB	SER A	3	121.739	18.031	-11.206	1.00	0.00
ATOM 30	2HB	SER A	3	122.641	17.848	-9.701	1.00	0.00
ATOM 31	HG	SER A	3	123.781	19.758	-10.252	1.00	0.00
ATOM 32	N	GLY A	4	122.847	15.258	-10.956	1.00	0.00
ATOM 33	CA	GLY A	4	122.325	13.942	-11.272	1.00	0.00
ATOM 34	C	GLY A	4	121.131	13.570	-10.416	1.00	0.00
ATOM 35	O	GLY A	4	120.014	13.442	-10.917	1.00	0.00
ATOM 36	H	GLY A	4	122.901	15.549	-10.021	1.00	0.00
ATOM 37	1HA	GLY A	4	122.029	13.925	-12.310	1.00	0.00
ATOM 38	2HA	GLY A	4	123.105	13.211	-11.120	1.00	0.00
ATOM 39	N	SER A	5	121.366	13.394	-9.120	1.00	0.00
ATOM 40	CA	SER A	5	120.300	13.034	-8.191	1.00	0.00
ATOM 41	C	SER A	5	120.725	13.292	-6.750	1.00	0.00
ATOM 42	O	SER A	5	121.804	13.829	-6.496	1.00	0.00
ATOM 43	CB	SER A	5	119.918	11.564	-8.367	1.00	0.00
ATOM 44	OG	SER A	5	118.602	11.319	-7.902	1.00	0.00

ATOM 45	H	SER A	5	122.278	13.510	-8.780	1.00	0.00
ATOM 46	HA	SER A	5	119.443	13.650	-8.417	1.00	0.00
ATOM 47	1HB	SER A	5	119.969	11.303	-9.414	1.00	0.00
ATOM 48	2HB	SER A	5	120.605	10.946	-7.809	1.00	0.00
ATOM 49	HG	SER A	5	117.985	11.880	-8.377	1.00	0.00
ATOM 50	N	SER A	6	119.871	12.904	-5.808	1.00	0.00
ATOM 51	CA	SER A	6	120.158	13.094	-4.391	1.00	0.00
ATOM 52	C	SER A	6	120.904	11.891	-3.822	1.00	0.00
ATOM 53	O	SER A	6	120.766	10.772	-4.314	1.00	0.00
ATOM 54	CB	SER A	6	118.860	13.318	-3.612	1.00	0.00
ATOM 55	OG	SER A	6	118.541	14.697	-3.538	1.00	0.00
ATOM 56	H	SER A	6	119.027	12.481	-6.073	1.00	0.00
ATOM 57	HA	SER A	6	120.782	13.969	-4.293	1.00	0.00
ATOM 58	1HB	SER A	6	118.052	12.801	-4.106	1.00	0.00
ATOM 59	2HB	SER A	6	118.975	12.933	-2.609	1.00	0.00
ATOM 60	HG	SER A	6	118.107	14.880	-2.702	1.00	0.00
ATOM 61	N	GLY A	7	121.697	12.132	-2.782	1.00	0.00
ATOM 62	CA	GLY A	7	122.455	11.059	-2.163	1.00	0.00
ATOM 63	C	GLY A	7	123.939	11.360	-2.100	1.00	0.00
ATOM 64	O	GLY A	7	124.349	12.392	-1.568	1.00	0.00
ATOM 65	H	GLY A	7	121.768	13.044	-2.433	1.00	0.00
ATOM 66	1HA	GLY A	7	122.086	10.908	-1.159	1.00	0.00
ATOM 67	2HA	GLY A	7	122.306	10.153	-2.730	1.00	0.00
ATOM 68	N	LEU A	8	124.747	10.455	-2.645	1.00	0.00
ATOM 69	CA	LEU A	8	126.195	10.628	-2.648	1.00	0.00
ATOM 70	C	LEU A	8	126.735	10.727	-1.225	1.00	0.00
ATOM 71	O	LEU A	8	126.956	11.822	-0.708	1.00	0.00
ATOM 72	CB	LEU A	8	126.578	11.881	-3.439	1.00	0.00
ATOM 73	CG	LEU A	8	126.391	11.771	-4.954	1.00	0.00

ATOM 74	CD1	LEU A	8	125.132	12.503	-5.392	1.00	0.00
ATOM 75	CD2	LEU A	8	127.609	12.320	-5.684	1.00	0.00
ATOM 76	H	LEU A	8	124.360	9.653	-3.053	1.00	0.00
ATOM 77	HA	LEU A	8	126.631	9.764	-3.127	1.00	0.00
ATOM 78	1HB	LEU A	8	125.979	12.704	-3.080	1.00	0.00
ATOM 79	2HB	LEU A	8	127.617	12.101	-3.241	1.00	0.00
ATOM 80	HG	LEU A	8	126.281	10.731	-5.222	1.00	0.00
ATOM 81	1HD1	LEU A	8	125.389	13.502	-5.716	1.00	0.00
ATOM 82	2HD1	LEU A	8	124.442	12.560	-4.564	1.00	0.00
ATOM 83	3HD1	LEU A	8	124.669	11.968	-6.208	1.00	0.00
ATOM 84	1HD2	LEU A	8	127.471	12.206	-6.749	1.00	0.00
ATOM 85	2HD2	LEU A	8	128.489	11.776	-5.375	1.00	0.00
ATOM 86	3HD2	LEU A	8	127.731	13.366	-5.447	1.00	0.00
ATOM 87	N	ALA A	9	126.946	9.575	-0.597	1.00	0.00
ATOM 88	CA	ALA A	9	127.461	9.530	0.766	1.00	0.00
ATOM 89	C	ALA A	9	128.987	9.538	0.777	1.00	0.00
ATOM 90	O	ALA A	9	129.620	8.618	1.295	1.00	0.00
ATOM 91	CB	ALA A	9	126.930	8.302	1.490	1.00	0.00
ATOM 92	H	ALA A	9	126.752	8.734	-1.062	1.00	0.00
ATOM 93	HA	ALA A	9	127.103	10.408	1.285	1.00	0.00
ATOM 94	1HB	ALA A	9	126.984	7.446	0.834	1.00	0.00
ATOM 95	2HB	ALA A	9	125.902	8.470	1.778	1.00	0.00
ATOM 96	3HB	ALA A	9	127.525	8.119	2.372	1.00	0.00
ATOM 97	N	MET A	10	129.571	10.584	0.201	1.00	0.00
ATOM 98	CA	MET A	10	131.023	10.712	0.145	1.00	0.00
ATOM 99	C	MET A	10	131.429	12.104	-0.337	1.00	0.00
ATOM 100	O	MET A	10	132.025	12.252	-1.405	1.00	0.00
ATOM 101	CB	MET A	10	131.614	9.645	-0.779	1.00	0.00
ATOM 102	CG	MET A	10	130.848	9.478	-2.083	1.00	0.00

ATOM 103 SD MET A 10 131.914 9.566 -3.535 1.00 0.00  
ATOM 104 CE MET A 10 131.189 10.954 -4.404 1.00 0.00  
ATOM 105 H MET A 10 129.013 11.286 -0.194 1.00 0.00  
ATOM 106 HA MET A 10 131.407 10.564 1.143 1.00 0.00  
ATOM 107 1HB MET A 10 132.633 9.913 -1.014 1.00 0.00  
ATOM 108 2HB MET A 10 131.611 8.697 -0.261 1.00 0.00  
ATOM 109 1HG MET A 10 130.356 8.517 -2.075 1.00 0.00  
ATOM 110 2HG MET A 10 130.106 10.259 -2.151 1.00 0.00  
ATOM 111 1HE MET A 10 130.247 10.653 -4.838 1.00 0.00  
ATOM 112 2HE MET A 10 131.859 11.279 -5.186 1.00 0.00  
ATOM 113 3HE MET A 10 131.023 11.765 -3.711 1.00 0.00  
ATOM 114 N PRO A 11 131.111 13.149 0.447 1.00 0.00  
ATOM 115 CA PRO A 11 131.448 14.531 0.093 1.00 0.00  
ATOM 116 C PRO A 11 132.950 14.732 -0.102 1.00 0.00  
ATOM 117 O PRO A 11 133.376 15.329 -1.090 1.00 0.00  
ATOM 118 CB PRO A 11 130.946 15.355 1.283 1.00 0.00  
ATOM 119 CG PRO A 11 129.966 14.479 1.987 1.00 0.00  
ATOM 120 CD PRO A 11 130.402 13.063 1.735 1.00 0.00  
ATOM 121 HA PRO A 11 130.931 14.840 -0.803 1.00 0.00  
ATOM 122 1HB PRO A 11 131.778 15.610 1.923 1.00 0.00  
ATOM 123 2HB PRO A 11 130.476 16.258 0.923 1.00 0.00  
ATOM 124 1HG PRO A 11 129.982 14.690 3.045 1.00 0.00  
ATOM 125 2HG PRO A 11 128.975 14.641 1.587 1.00 0.00  
ATOM 126 1HD PRO A 11 131.065 12.727 2.519 1.00 0.00  
ATOM 127 2HD PRO A 11 129.544 12.412 1.659 1.00 0.00  
ATOM 128 N PRO A 12 133.779 14.235 0.835 1.00 0.00  
ATOM 129 CA PRO A 12 135.238 14.369 0.742 1.00 0.00  
ATOM 130 C PRO A 12 135.783 13.801 -0.562 1.00 0.00  
ATOM 131 O PRO A 12 136.871 14.169 -1.006 1.00 0.00

ATOM 132	CB	PRO A	12	135.755	13.558	1.934	1.00	0.00
ATOM 133	CG	PRO A	12	134.615	13.509	2.890	1.00	0.00
ATOM 134	CD	PRO A	12	133.371	13.501	2.049	1.00	0.00
ATOM 135	HA	PRO A	12	135.546	15.399	0.841	1.00	0.00
ATOM 136	1HB	PRO A	12	136.037	12.568	1.604	1.00	0.00
ATOM 137	2HB	PRO A	12	136.611	14.055	2.366	1.00	0.00
ATOM 138	1HG	PRO A	12	134.672	12.609	3.484	1.00	0.00
ATOM 139	2HG	PRO A	12	134.632	14.382	3.526	1.00	0.00
ATOM 140	1HD	PRO A	12	133.084	12.488	1.809	1.00	0.00
ATOM 141	2HD	PRO A	12	132.570	14.012	2.558	1.00	0.00
ATOM 142	N	GLY A	13	135.020	12.900	-1.175	1.00	0.00
ATOM 143	CA	GLY A	13	135.443	12.293	-2.423	1.00	0.00
ATOM 144	C	GLY A	13	135.739	10.814	-2.278	1.00	0.00
ATOM 145	O	GLY A	13	135.196	10.149	-1.395	1.00	0.00
ATOM 146	H	GLY A	13	134.162	12.644	-0.774	1.00	0.00
ATOM 147	1HA	GLY A	13	134.662	12.423	-3.156	1.00	0.00
ATOM 148	2HA	GLY A	13	136.335	12.795	-2.771	1.00	0.00
ATOM 149	N	ASN A	14	136.601	10.296	-3.147	1.00	0.00
ATOM 150	CA	ASN A	14	136.968	8.885	-3.112	1.00	0.00
ATOM 151	C	ASN A	14	135.742	7.999	-3.313	1.00	0.00
ATOM 152	O	ASN A	14	134.635	8.494	-3.530	1.00	0.00
ATOM 153	CB	ASN A	14	137.644	8.545	-1.783	1.00	0.00
ATOM 154	CG	ASN A	14	138.954	9.284	-1.595	1.00	0.00
ATOM 155	OD1	ASN A	14	139.305	10.161	-2.385	1.00	0.00
ATOM 156	ND2	ASN A	14	139.687	8.933	-0.545	1.00	0.00
ATOM 157	H	ASN A	14	137.000	10.876	-3.828	1.00	0.00
ATOM 158	HA	ASN A	14	137.664	8.704	-3.917	1.00	0.00
ATOM 159	1HB	ASN A	14	136.983	8.810	-0.971	1.00	0.00
ATOM 160	2HB	ASN A	14	137.842	7.484	-1.747	1.00	0.00



ATOM 161	1HD2	ASN A	14	139.345	8.227	0.043	1.00	0.00
ATOM 162	2HD2	ASN A	14	140.538	9.395	-0.399	1.00	0.00
ATOM 163	N	SER A	15	135.948	6.689	-3.242	1.00	0.00
ATOM 164	CA	SER A	15	134.858	5.734	-3.416	1.00	0.00
ATOM 165	C	SER A	15	133.890	5.791	-2.239	1.00	0.00
ATOM 166	O	SER A	15	132.711	6.101	-2.407	1.00	0.00
ATOM 167	CB	SER A	15	135.414	4.317	-3.566	1.00	0.00
ATOM 168	OG	SER A	15	136.208	3.959	-2.448	1.00	0.00
ATOM 169	H	SER A	15	136.852	6.355	-3.068	1.00	0.00
ATOM 170	HA	SER A	15	134.326	5.999	-4.317	1.00	0.00
ATOM 171	1HB	SER A	15	134.595	3.618	-3.647	1.00	0.00
ATOM 172	2HB	SER A	15	136.023	4.263	-4.456	1.00	0.00
ATOM 173	HG	SER A	15	137.082	3.698	-2.747	1.00	0.00
ATOM 174	N	HIS A	16	134.398	5.491	-1.048	1.00	0.00
ATOM 175	CA	HIS A	16	133.578	5.509	0.159	1.00	0.00
ATOM 176	C	HIS A	16	134.260	6.307	1.267	1.00	0.00
ATOM 177	O	HIS A	16	133.836	7.413	1.599	1.00	0.00
ATOM 178	CB	HIS A	16	133.304	4.080	0.634	1.00	0.00
ATOM 179	CG	HIS A	16	131.900	3.624	0.378	1.00	0.00
ATOM 180	ND1	HIS A	16	131.007	3.335	1.388	1.00	0.00
ATOM 181	CD2	HIS A	16	131.237	3.409	-0.782	1.00	0.00
ATOM 182	CE1	HIS A	16	129.855	2.961	0.860	1.00	0.00
ATOM 183	NE2	HIS A	16	129.968	2.997	-0.455	1.00	0.00
ATOM 184	H	HIS A	16	135.345	5.253	-0.978	1.00	0.00
ATOM 185	HA	HIS A	16	132.640	5.984	-0.086	1.00	0.00
ATOM 186	1HB	HIS A	16	133.970	3.403	0.122	1.00	0.00
ATOM 187	2HB	HIS A	16	133.485	4.019	1.698	1.00	0.00
ATOM 188	HD1	HIS A	16	131.190	3.395	2.350	1.00	0.00
ATOM 189	HD2	HIS A	16	131.632	3.536	-1.780	1.00	0.00

ATOM 190	HE1	HIS A	16	128.971	2.675	1.411	1.00	0.00
ATOM 191	HE2	HIS A	16	129.289	2.685	-1.088	1.00	0.00
ATOM 192	N	GLY A	17	135.318	5.736	1.834	1.00	0.00
ATOM 193	CA	GLY A	17	136.041	6.408	2.898	1.00	0.00
ATOM 194	C	GLY A	17	137.368	5.742	3.205	1.00	0.00
ATOM 195	O	GLY A	17	137.614	5.325	4.336	1.00	0.00
ATOM 196	H	GLY A	17	135.609	4.853	1.527	1.00	0.00
ATOM 197	1HA	GLY A	17	136.223	7.431	2.604	1.00	0.00
ATOM 198	2HA	GLY A	17	135.433	6.403	3.791	1.00	0.00
ATOM 199	N	LEU A	18	138.224	5.641	2.194	1.00	0.00
ATOM 200	CA	LEU A	18	139.533	5.020	2.360	1.00	0.00
ATOM 201	C	LEU A	18	140.585	6.058	2.735	1.00	0.00
ATOM 202	O	LEU A	18	140.997	6.868	1.904	1.00	0.00
ATOM 203	CB	LEU A	18	139.946	4.299	1.074	1.00	0.00
ATOM 204	CG	LEU A	18	138.884	3.370	0.484	1.00	0.00
ATOM 205	CD1	LEU A	18	139.224	3.020	-0.957	1.00	0.00
ATOM 206	CD2	LEU A	18	138.754	2.110	1.325	1.00	0.00
ATOM 207	H	LEU A	18	137.969	5.991	1.314	1.00	0.00
ATOM 208	HA	LEU A	18	139.458	4.296	3.158	1.00	0.00
ATOM 209	1HB	LEU A	18	140.195	5.046	0.333	1.00	0.00
ATOM 210	2HB	LEU A	18	140.828	3.714	1.282	1.00	0.00
ATOM 211	HG	LEU A	18	137.929	3.877	0.487	1.00	0.00
ATOM 212	1HD1	LEU A	18	140.293	3.082	-1.099	1.00	0.00
ATOM 213	2HD1	LEU A	18	138.731	3.712	-1.622	1.00	0.00
ATOM 214	3HD1	LEU A	18	138.890	2.015	-1.171	1.00	0.00
ATOM 215	1HD2	LEU A	18	139.718	1.634	1.411	1.00	0.00
ATOM 216	2HD2	LEU A	18	138.058	1.432	0.852	1.00	0.00
ATOM 217	3HD2	LEU A	18	138.390	2.369	2.308	1.00	0.00
ATOM 218	N	GLU A	19	141.017	6.028	3.992	1.00	0.00

ATOM 219	CA	GLU A	19	142.022	6.965	4.478	1.00	0.00
ATOM 220	C	GLU A	19	143.071	6.248	5.321	1.00	0.00
ATOM 221	O	GLU A	19	143.018	5.031	5.491	1.00	0.00
ATOM 222	CB	GLU A	19	141.360	8.074	5.299	1.00	0.00
ATOM 223	CG	GLU A	19	140.503	7.556	6.441	1.00	0.00
ATOM 224	CD	GLU A	19	139.214	8.339	6.604	1.00	0.00
ATOM 225	OE1	GLU A	19	138.659	8.787	5.579	1.00	0.00
ATOM 226	OE2	GLU A	19	138.761	8.502	7.756	1.00	0.00
ATOM 227	H	GLU A	19	140.651	5.358	4.607	1.00	0.00
ATOM 228	HA	GLU A	19	142.506	7.405	3.619	1.00	0.00
ATOM 229	1HB	GLU A	19	142.132	8.706	5.714	1.00	0.00
ATOM 230	2HB	GLU A	19	140.735	8.664	4.646	1.00	0.00
ATOM 231	1HG	GLU A	19	140.256	6.523	6.249	1.00	0.00
ATOM 232	2HG	GLU A	19	141.068	7.626	7.359	1.00	0.00
ATOM 233	N	VAL A	20	144.023	7.011	5.846	1.00	0.00
ATOM 234	CA	VAL A	20	145.085	6.447	6.672	1.00	0.00
ATOM 235	C	VAL A	20	144.518	5.816	7.939	1.00	0.00
ATOM 236	O	VAL A	20	143.685	6.411	8.621	1.00	0.00
ATOM 237	CB	VAL A	20	146.122	7.518	7.065	1.00	0.00
ATOM 238	CG1	VAL A	20	147.296	6.884	7.795	1.00	0.00
ATOM 239	CG2	VAL A	20	146.598	8.279	5.835	1.00	0.00
ATOM 240	H	VAL A	20	144.013	7.976	5.675	1.00	0.00
ATOM 241	HA	VAL A	20	145.587	5.685	6.095	1.00	0.00
ATOM 242	HB	VAL A	20	145.648	8.220	7.734	1.00	0.00
ATOM 243	1HG1	VAL A	20	148.120	7.582	7.825	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.602	5.988	7.276	1.00	0.00
ATOM 245	3HG1	VAL A	20	147.000	6.632	8.802	1.00	0.00
ATOM 246	1HG2	VAL A	20	146.673	9.330	6.069	1.00	0.00
ATOM 247	2HG2	VAL A	20	145.893	8.139	5.029	1.00	0.00

ATOM 248	3HG2	VAL A	20	147.567	7.907	5.535	1.00	0.00
ATOM 249	N	GLY A	21	144.974	4.607	8.247	1.00	0.00
ATOM 250	CA	GLY A	21	144.501	3.914	9.431	1.00	0.00
ATOM 251	C	GLY A	21	143.495	2.828	9.106	1.00	0.00
ATOM 252	O	GLY A	21	143.520	1.751	9.699	1.00	0.00
ATOM 253	H	GLY A	21	145.639	4.181	7.665	1.00	0.00
ATOM 254	1HA	GLY A	21	145.347	3.468	9.935	1.00	0.00
ATOM 255	2HA	GLY A	21	144.040	4.631	10.093	1.00	0.00
ATOM 256	N	SER A	22	142.605	3.114	8.159	1.00	0.00
ATOM 257	CA	SER A	22	141.584	2.153	7.757	1.00	0.00
ATOM 258	C	SER A	22	142.168	1.099	6.821	1.00	0.00
ATOM 259	O	SER A	22	143.084	1.379	6.049	1.00	0.00
ATOM 260	CB	SER A	22	140.421	2.872	7.070	1.00	0.00
ATOM 261	OG	SER A	22	139.627	3.571	8.012	1.00	0.00
ATOM 262	H	SER A	22	142.636	3.990	7.723	1.00	0.00
ATOM 263	HA	SER A	22	141.218	1.664	8.647	1.00	0.00
ATOM 264	1HB	SER A	22	140.810	3.578	6.352	1.00	0.00
ATOM 265	2HB	SER A	22	139.803	2.146	6.563	1.00	0.00
ATOM 266	HG	SER A	22	139.120	4.251	7.562	1.00	0.00
ATOM 267	N	LEU A	23	141.632	-0.115	6.897	1.00	0.00
ATOM 268	CA	LEU A	23	142.098	-1.212	6.057	1.00	0.00
ATOM 269	C	LEU A	23	141.431	-1.171	4.687	1.00	0.00
ATOM 270	O	LEU A	23	140.263	-0.802	4.564	1.00	0.00
ATOM 271	CB	LEU A	23	141.820	-2.555	6.734	1.00	0.00
ATOM 272	CG	LEU A	23	142.685	-2.855	7.958	1.00	0.00
ATOM 273	CD1	LEU A	23	141.930	-3.730	8.945	1.00	0.00
ATOM 274	CD2	LEU A	23	143.986	-3.523	7.539	1.00	0.00
ATOM 275	H	LEU A	23	140.904	-0.277	7.533	1.00	0.00
ATOM 276	HA	LEU A	23	143.165	-1.098	5.928	1.00	0.00

ATOM 277	1HB	LEU	A	23	140.783	-2.572	7.039	1.00	0.00
ATOM 278	2HB	LEU	A	23	141.978	-3.339	6.009	1.00	0.00
ATOM 279	HG	LEU	A	23	142.929	-1.927	8.454	1.00	0.00
ATOM 280	1HD1	LEU	A	23	142.506	-3.832	9.853	1.00	0.00
ATOM 281	2HD1	LEU	A	23	141.767	-4.705	8.511	1.00	0.00
ATOM 282	3HD1	LEU	A	23	140.977	-3.276	9.173	1.00	0.00
ATOM 283	1HD2	LEU	A	23	144.455	-2.941	6.758	1.00	0.00
ATOM 284	2HD2	LEU	A	23	143.779	-4.517	7.171	1.00	0.00
ATOM 285	3HD2	LEU	A	23	144.650	-3.584	8.389	1.00	0.00
ATOM 286	N	ALA	A	24	142.180	-1.554	3.658	1.00	0.00
ATOM 287	CA	ALA	A	24	141.661	-1.562	2.296	1.00	0.00
ATOM 288	C	ALA	A	24	142.228	-2.732	1.500	1.00	0.00
ATOM 289	O	ALA	A	24	143.420	-3.033	1.583	1.00	0.00
ATOM 290	CB	ALA	A	24	141.979	-0.245	1.603	1.00	0.00
ATOM 291	H	ALA	A	24	143.104	-1.837	3.819	1.00	0.00
ATOM 292	HA	ALA	A	24	140.587	-1.663	2.349	1.00	0.00
ATOM 293	1HB	ALA	A	24	142.874	-0.358	1.009	1.00	0.00
ATOM 294	2HB	ALA	A	24	142.134	0.524	2.345	1.00	0.00
ATOM 295	3HB	ALA	A	24	141.155	0.033	0.962	1.00	0.00
ATOM 296	N	GLU	A	25	141.369	-3.388	0.727	1.00	0.00
ATOM 297	CA	GLU	A	25	141.786	-4.526	-0.084	1.00	0.00
ATOM 298	C	GLU	A	25	141.885	-4.138	-1.555	1.00	0.00
ATOM 299	O	GLU	A	25	140.962	-3.548	-2.117	1.00	0.00
ATOM 300	CB	GLU	A	25	140.802	-5.686	0.084	1.00	0.00
ATOM 301	CG	GLU	A	25	141.261	-6.974	-0.579	1.00	0.00
ATOM 302	CD	GLU	A	25	140.550	-7.240	-1.891	1.00	0.00
ATOM 303	OE1	GLU	A	25	140.211	-8.414	-2.155	1.00	0.00
ATOM 304	OE2	GLU	A	25	140.330	-6.277	-2.654	1.00	0.00
ATOM 305	H	GLU	A	25	140.432	-3.101	0.703	1.00	0.00

ATOM 306	HA	GLU A	25	142.759	-4.839	0.261	1.00	0.00
ATOM 307	1HB	GLU A	25	140.665	-5.878	1.138	1.00	0.00
ATOM 308	2HB	GLU A	25	139.853	-5.403	-0.348	1.00	0.00
ATOM 309	1HG	GLU A	25	142.322	-6.906	-0.771	1.00	0.00
ATOM 310	2HG	GLU A	25	141.069	-7.798	0.092	1.00	0.00
ATOM 311	N	VAL A	26	143.013	-4.472	-2.175	1.00	0.00
ATOM 312	CA	VAL A	26	143.234	-4.159	-3.582	1.00	0.00
ATOM 313	C	VAL A	26	142.875	-5.344	-4.470	1.00	0.00
ATOM 314	O	VAL A	26	143.102	-6.498	-4.106	1.00	0.00
ATOM 315	CB	VAL A	26	144.698	-3.759	-3.844	1.00	0.00
ATOM 316	CG1	VAL A	26	144.864	-3.239	-5.263	1.00	0.00
ATOM 317	CG2	VAL A	26	145.159	-2.722	-2.830	1.00	0.00
ATOM 318	H	VAL A	26	143.712	-4.941	-1.674	1.00	0.00
ATOM 319	HA	VAL A	26	142.602	-3.322	-3.840	1.00	0.00
ATOM 320	HB	VAL A	26	145.315	-4.638	-3.733	1.00	0.00
ATOM 321	1HG1	VAL A	26	143.919	-2.852	-5.618	1.00	0.00
ATOM 322	2HG1	VAL A	26	145.187	-4.044	-5.907	1.00	0.00
ATOM 323	3HG1	VAL A	26	145.602	-2.450	-5.274	1.00	0.00
ATOM 324	1HG2	VAL A	26	145.819	-2.017	-3.312	1.00	0.00
ATOM 325	2HG2	VAL A	26	145.683	-3.214	-2.026	1.00	0.00
ATOM 326	3HG2	VAL A	26	144.300	-2.200	-2.434	1.00	0.00
ATOM 327	N	LYS A	27	142.313	-5.052	-5.639	1.00	0.00
ATOM 328	CA	LYS A	27	141.922	-6.094	-6.581	1.00	0.00
ATOM 329	C	LYS A	27	143.099	-6.503	-7.462	1.00	0.00
ATOM 330	O	LYS A	27	143.028	-6.423	-8.689	1.00	0.00
ATOM 331	CB	LYS A	27	140.758	-5.616	-7.450	1.00	0.00
ATOM 332	CG	LYS A	27	139.941	-6.748	-8.051	1.00	0.00
ATOM 333	CD	LYS A	27	138.455	-6.426	-8.056	1.00	0.00
ATOM 334	CE	LYS A	27	138.093	-5.490	-9.199	1.00	0.00

ATOM 335	NZ	LYS A	27	136.757	-5.806	-9.773	1.00	0.00
ATOM 336	H	LYS A	27	142.157	-4.114	-5.874	1.00	0.00
ATOM 337	HA	LYS A	27	141.603	-6.954	-6.009	1.00	0.00
ATOM 338	1HB	LYS A	27	140.100	-5.008	-6.846	1.00	0.00
ATOM 339	2HB	LYS A	27	141.148	-5.014	-8.257	1.00	0.00
ATOM 340	1HG	LYS A	27	140.267	-6.913	-9.068	1.00	0.00
ATOM 341	2HG	LYS A	27	140.104	-7.644	-7.470	1.00	0.00
ATOM 342	1HD	LYS A	27	137.898	-7.344	-8.166	1.00	0.00
ATOM 343	2HD	LYS A	27	138.196	-5.954	-7.120	1.00	0.00
ATOM 344	1HE	LYS A	27	138.083	-4.476	-8.826	1.00	0.00
ATOM 345	2HE	LYS A	27	138.840	-5.581	-9.973	1.00	0.00
ATOM 346	1HZ	LYS A	27	136.863	-6.410	-10.613	1.00	0.00
ATOM 347	2HZ	LYS A	27	136.269	-4.931	-10.049	1.00	0.00
ATOM 348	3HZ	LYS A	27	136.175	-6.307	-9.072	1.00	0.00
ATOM 349	N	GLU A	28	144.182	-6.941	-6.829	1.00	0.00
ATOM 350	CA	GLU A	28	145.374	-7.363	-7.554	1.00	0.00
ATOM 351	C	GLU A	28	145.422	-8.882	-7.682	1.00	0.00
ATOM 352	O	GLU A	28	144.507	-9.581	-7.248	1.00	0.00
ATOM 353	CB	GLU A	28	146.634	-6.857	-6.845	1.00	0.00
ATOM 354	CG	GLU A	28	147.639	-6.209	-7.782	1.00	0.00
ATOM 355	CD	GLU A	28	148.605	-5.292	-7.057	1.00	0.00
ATOM 356	OE1	GLU A	28	148.525	-4.063	-7.264	1.00	0.00
ATOM 357	OE2	GLU A	28	149.440	-5.803	-6.282	1.00	0.00
ATOM 358	H	GLU A	28	144.179	-6.982	-5.849	1.00	0.00
ATOM 359	HA	GLU A	28	145.331	-6.931	-8.542	1.00	0.00
ATOM 360	1HB	GLU A	28	146.346	-6.129	-6.102	1.00	0.00
ATOM 361	2HB	GLU A	28	147.116	-7.689	-6.354	1.00	0.00
ATOM 362	1HG	GLU A	28	148.206	-6.984	-8.275	1.00	0.00
ATOM 363	2HG	GLU A	28	147.103	-5.631	-8.521	1.00	0.00

ATOM 364	N	ASN A	29	146.495	-9.387	-8.282	1.00	0.00
ATOM 365	CA	ASN A	29	146.661	-10.823	-8.467	1.00	0.00
ATOM 366	C	ASN A	29	146.743	-11.539	-7.120	1.00	0.00
ATOM 367	O	ASN A	29	145.928	-12.410	-6.820	1.00	0.00
ATOM 368	CB	ASN A	29	147.918	-11.112	-9.291	1.00	0.00
ATOM 369	CG	ASN A	29	147.608	-11.324	-10.760	1.00	0.00
ATOM 370	OD1	ASN A	29	147.598	-12.454	-11.248	1.00	0.00
ATOM 371	ND2	ASN A	29	147.356	-10.233	-11.475	1.00	0.00
ATOM 372	H	ASN A	29	147.192	-8.780	-8.608	1.00	0.00
ATOM 373	HA	ASN A	29	145.798	-11.190	-9.003	1.00	0.00
ATOM 374	1HB	ASN A	29	148.598	-10.277	-9.203	1.00	0.00
ATOM 375	2HB	ASN A	29	148.395	-12.002	-8.910	1.00	0.00
ATOM 376	1HD2	ASN A	29	147.382	-9.365	-11.020	1.00	0.00
ATOM 377	2HD2	ASN A	29	147.152	-10.341	-12.427	1.00	0.00
ATOM 378	N	PRO A	30	147.733	-11.175	-6.287	1.00	0.00
ATOM 379	CA	PRO A	30	147.919	-11.784	-4.967	1.00	0.00
ATOM 380	C	PRO A	30	146.921	-11.253	-3.938	1.00	0.00
ATOM 381	O	PRO A	30	147.010	-10.099	-3.519	1.00	0.00
ATOM 382	CB	PRO A	30	149.341	-11.369	-4.593	1.00	0.00
ATOM 383	CG	PRO A	30	149.544	-10.067	-5.286	1.00	0.00
ATOM 384	CD	PRO A	30	148.751	-10.141	-6.565	1.00	0.00
ATOM 385	HA	PRO A	30	147.855	-12.860	-5.014	1.00	0.00
ATOM 386	1HB	PRO A	30	149.419	-11.265	-3.521	1.00	0.00
ATOM 387	2HB	PRO A	30	150.040	-12.115	-4.942	1.00	0.00
ATOM 388	1HG	PRO A	30	149.181	-9.261	-4.667	1.00	0.00
ATOM 389	2HG	PRO A	30	150.593	-9.927	-5.506	1.00	0.00
ATOM 390	1HD	PRO A	30	148.285	-9.191	-6.775	1.00	0.00
ATOM 391	2HD	PRO A	30	149.386	-10.439	-7.385	1.00	0.00
ATOM 392	N	PRO A	31	145.956	-12.087	-3.514	1.00	0.00



ATOM 393	CA	PRO A	31	144.946	-11.687	-2.529	1.00	0.00
ATOM 394	C	PRO A	31	145.541	-11.490	-1.138	1.00	0.00
ATOM 395	O	PRO A	31	145.621	-12.431	-0.349	1.00	0.00
ATOM 396	CB	PRO A	31	143.962	-12.857	-2.529	1.00	0.00
ATOM 397	CG	PRO A	31	144.764	-14.027	-2.981	1.00	0.00
ATOM 398	CD	PRO A	31	145.771	-13.483	-3.957	1.00	0.00
ATOM 399	HA	PRO A	31	144.436	-10.783	-2.831	1.00	0.00
ATOM 400	1HB	PRO A	31	143.574	-13.006	-1.531	1.00	0.00
ATOM 401	2HB	PRO A	31	143.149	-12.649	-3.209	1.00	0.00
ATOM 402	1HG	PRO A	31	145.264	-14.479	-2.137	1.00	0.00
ATOM 403	2HG	PRO A	31	144.123	-14.746	-3.468	1.00	0.00
ATOM 404	1HD	PRO A	31	146.697	-14.035	-3.889	1.00	0.00
ATOM 405	2HD	PRO A	31	145.380	-13.519	-4.963	1.00	0.00
ATOM 406	N	PHE A	32	145.954	-10.262	-0.844	1.00	0.00
ATOM 407	CA	PHE A	32	146.541	-9.942	0.452	1.00	0.00
ATOM 408	C	PHE A	32	145.685	-8.925	1.201	1.00	0.00
ATOM 409	O	PHE A	32	144.726	-8.383	0.652	1.00	0.00
ATOM 410	CB	PHE A	32	147.959	-9.398	0.273	1.00	0.00
ATOM 411	CG	PHE A	32	148.045	-8.250	-0.693	1.00	0.00
ATOM 412	CD1	PHE A	32	148.676	-8.404	-1.917	1.00	0.00
ATOM 413	CD2	PHE A	32	147.495	-7.019	-0.376	1.00	0.00
ATOM 414	CE1	PHE A	32	148.757	-7.350	-2.808	1.00	0.00
ATOM 415	CE2	PHE A	32	147.573	-5.962	-1.262	1.00	0.00
ATOM 416	CZ	PHE A	32	148.205	-6.127	-2.480	1.00	0.00
ATOM 417	H	PHE A	32	145.862	-9.553	-1.515	1.00	0.00
ATOM 418	HA	PHE A	32	146.585	-10.853	1.030	1.00	0.00
ATOM 419	1HB	PHE A	32	148.329	-9.056	1.228	1.00	0.00
ATOM 420	2HB	PHE A	32	148.597	-10.190	-0.093	1.00	0.00
ATOM 421	HD1	PHE A	32	149.108	-9.360	-2.174	1.00	0.00

ATOM 422	HD2	PHE A	32	147.001	-6.889	0.575	1.00	0.00
ATOM 423	HE1	PHE A	32	149.252	-7.482	-3.758	1.00	0.00
ATOM 424	HE2	PHE A	32	147.140	-5.006	-1.004	1.00	0.00
ATOM 425	HZ	PHE A	32	148.266	-5.302	-3.174	1.00	0.00
ATOM 426	N	TYR A	33	146.038	-8.673	2.456	1.00	0.00
ATOM 427	CA	TYR A	33	145.302	-7.722	3.281	1.00	0.00
ATOM 428	C	TYR A	33	146.253	-6.758	3.983	1.00	0.00
ATOM 429	O	TYR A	33	147.107	-7.174	4.765	1.00	0.00
ATOM 430	CB	TYR A	33	144.453	-8.462	4.315	1.00	0.00
ATOM 431	CG	TYR A	33	143.141	-8.978	3.767	1.00	0.00
ATOM 432	CD1	TYR A	33	142.756	-10.298	3.963	1.00	0.00
ATOM 433	CD2	TYR A	33	142.290	-8.145	3.051	1.00	0.00
ATOM 434	CE1	TYR A	33	141.559	-10.773	3.462	1.00	0.00
ATOM 435	CE2	TYR A	33	141.092	-8.612	2.547	1.00	0.00
ATOM 436	CZ	TYR A	33	140.731	-9.927	2.755	1.00	0.00
ATOM 437	OH	TYR A	33	139.538	-10.397	2.256	1.00	0.00
ATOM 438	H	TYR A	33	146.812	-9.137	2.838	1.00	0.00
ATOM 439	HA	TYR A	33	144.650	-7.156	2.632	1.00	0.00
ATOM 440	1HB	TYR A	33	145.010	-9.308	4.690	1.00	0.00
ATOM 441	2HB	TYR A	33	144.231	-7.793	5.134	1.00	0.00
ATOM 442	HD1	TYR A	33	143.406	-10.958	4.516	1.00	0.00
ATOM 443	HD2	TYR A	33	142.577	-7.116	2.889	1.00	0.00
ATOM 444	HE1	TYR A	33	141.276	-11.802	3.625	1.00	0.00
ATOM 445	HE2	TYR A	33	140.443	-7.949	1.995	1.00	0.00
ATOM 446	HH	TYR A	33	139.663	-11.281	1.906	1.00	0.00
ATOM 447	N	GLY A	34	146.099	-5.469	3.698	1.00	0.00
ATOM 448	CA	GLY A	34	146.951	-4.466	4.310	1.00	0.00
ATOM 449	C	GLY A	34	146.174	-3.251	4.775	1.00	0.00
ATOM 450	O	GLY A	34	144.997	-3.095	4.450	1.00	0.00

ATOM 451	H	GLY A	34	145.401	-5.196	3.066	1.00	0.00
ATOM 452	1HA	GLY A	34	147.453	-4.907	5.160	1.00	0.00
ATOM 453	2HA	GLY A	34	147.693	-4.153	3.591	1.00	0.00
ATOM 454	N	VAL A	35	146.834	-2.386	5.539	1.00	0.00
ATOM 455	CA	VAL A	35	146.199	-1.178	6.051	1.00	0.00
ATOM 456	C	VAL A	35	146.808	0.071	5.421	1.00	0.00
ATOM 457	O	VAL A	35	148.011	0.125	5.164	1.00	0.00
ATOM 458	CB	VAL A	35	146.323	-1.085	7.585	1.00	0.00
ATOM 459	CG1	VAL A	35	147.784	-1.017	8.004	1.00	0.00
ATOM 460	CG2	VAL A	35	145.552	0.115	8.113	1.00	0.00
ATOM 461	H	VAL A	35	147.771	-2.566	5.764	1.00	0.00
ATOM 462	HA	VAL A	35	145.150	-1.221	5.797	1.00	0.00
ATOM 463	HB	VAL A	35	145.892	-1.978	8.014	1.00	0.00
ATOM 464	1HG1	VAL A	35	148.204	-0.071	7.695	1.00	0.00
ATOM 465	2HG1	VAL A	35	148.330	-1.823	7.536	1.00	0.00
ATOM 466	3HG1	VAL A	35	147.856	-1.109	9.077	1.00	0.00
ATOM 467	1HG2	VAL A	35	145.807	0.279	9.150	1.00	0.00
ATOM 468	2HG2	VAL A	35	144.492	-0.072	8.028	1.00	0.00
ATOM 469	3HG2	VAL A	35	145.810	0.992	7.536	1.00	0.00
ATOM 470	N	ILE A	36	145.971	1.073	5.176	1.00	0.00
ATOM 471	CA	ILE A	36	146.429	2.321	4.577	1.00	0.00
ATOM 472	C	ILE A	36	147.374	3.064	5.516	1.00	0.00
ATOM 473	O	ILE A	36	147.092	3.216	6.705	1.00	0.00
ATOM 474	CB	ILE A	36	145.246	3.243	4.222	1.00	0.00
ATOM 475	CG1	ILE A	36	144.208	2.484	3.392	1.00	0.00
ATOM 476	CG2	ILE A	36	145.738	4.471	3.468	1.00	0.00
ATOM 477	CD1	ILE A	36	142.999	3.317	3.025	1.00	0.00
ATOM 478	H	ILE A	36	145.024	0.971	5.403	1.00	0.00
ATOM 479	HA	ILE A	36	146.957	2.080	3.666	1.00	0.00

ATOM 480	HB	ILE A	36	144.788	3.577	5.141	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.667	2.145	2.476	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.863	1.628	3.955	1.00	0.00
ATOM 483	1HG2	ILE A	36	145.851	5.295	4.157	1.00	0.00
ATOM 484	2HG2	ILE A	36	145.022	4.736	2.703	1.00	0.00
ATOM 485	3HG2	ILE A	36	146.690	4.253	3.008	1.00	0.00
ATOM 486	1HD1	ILE A	36	143.202	4.357	3.236	1.00	0.00
ATOM 487	2HD1	ILE A	36	142.148	2.992	3.605	1.00	0.00
ATOM 488	3HD1	ILE A	36	142.786	3.198	1.974	1.00	0.00
ATOM 489	N	ARG A	37	148.499	3.521	4.974	1.00	0.00
ATOM 490	CA	ARG A	37	149.487	4.246	5.763	1.00	0.00
ATOM 491	C	ARG A	37	149.637	5.680	5.265	1.00	0.00
ATOM 492	O	ARG A	37	149.354	6.632	5.992	1.00	0.00
ATOM 493	CB	ARG A	37	150.838	3.530	5.706	1.00	0.00
ATOM 494	CG	ARG A	37	150.753	2.046	6.021	1.00	0.00
ATOM 495	CD	ARG A	37	150.195	1.803	7.414	1.00	0.00
ATOM 496	NE	ARG A	37	151.099	2.281	8.457	1.00	0.00
ATOM 497	CZ	ARG A	37	150.986	1.952	9.743	1.00	0.00
ATOM 498	NH1	ARG A	37	150.012	1.148	10.146	1.00	0.00
ATOM 499	NH2	ARG A	37	151.853	2.429	10.626	1.00	0.00
ATOM 500	H	ARG A	37	148.667	3.368	4.021	1.00	0.00
ATOM 501	HA	ARG A	37	149.145	4.267	6.787	1.00	0.00
ATOM 502	1HB	ARG A	37	151.251	3.643	4.714	1.00	0.00
ATOM 503	2HB	ARG A	37	151.507	3.990	6.419	1.00	0.00
ATOM 504	1HG	ARG A	37	150.108	1.570	5.298	1.00	0.00
ATOM 505	2HG	ARG A	37	151.743	1.618	5.960	1.00	0.00
ATOM 506	1HD	ARG A	37	149.251	2.321	7.505	1.00	0.00
ATOM 507	2HD	ARG A	37	150.037	0.742	7.545	1.00	0.00
ATOM 508	HE	ARG A	37	151.828	2.877	8.187	1.00	0.00

ATOM 509	1HH1	ARG	A	37	149.355	0.785	9.486	1.00	0.00
ATOM 510	2HH1	ARG	A	37	149.933	0.905	11.114	1.00	0.00
ATOM 511	1HH2	ARG	A	37	152.590	3.035	10.327	1.00	0.00
ATOM 512	2HH2	ARG	A	37	151.769	2.182	11.592	1.00	0.00
ATOM 513	N	TRP	A	38	150.084	5.827	4.022	1.00	0.00
ATOM 514	CA	TRP	A	38	150.270	7.146	3.428	1.00	0.00
ATOM 515	C	TRP	A	38	149.501	7.268	2.117	1.00	0.00
ATOM 516	O	TRP	A	38	149.565	6.385	1.262	1.00	0.00
ATOM 517	CB	TRP	A	38	151.761	7.418	3.190	1.00	0.00
ATOM 518	CG	TRP	A	38	152.021	8.634	2.350	1.00	0.00
ATOM 519	CD1	TRP	A	38	152.212	9.911	2.791	1.00	0.00
ATOM 520	CD2	TRP	A	38	152.116	8.683	0.922	1.00	0.00
ATOM 521	NE1	TRP	A	38	152.417	10.753	1.725	1.00	0.00
ATOM 522	CE2	TRP	A	38	152.363	10.022	0.565	1.00	0.00
ATOM 523	CE3	TRP	A	38	152.014	7.725	-0.090	1.00	0.00
ATOM 524	CZ2	TRP	A	38	152.511	10.424	-0.760	1.00	0.00
ATOM 525	CZ3	TRP	A	38	152.162	8.125	-1.405	1.00	0.00
ATOM 526	CH2	TRP	A	38	152.408	9.465	-1.729	1.00	0.00
ATOM 527	H	TRP	A	38	150.293	5.030	3.491	1.00	0.00
ATOM 528	HA	TRP	A	38	149.888	7.879	4.123	1.00	0.00
ATOM 529	1HB	TRP	A	38	152.250	7.560	4.142	1.00	0.00
ATOM 530	2HB	TRP	A	38	152.198	6.566	2.690	1.00	0.00
ATOM 531	HD1	TRP	A	38	152.198	10.204	3.831	1.00	0.00
ATOM 532	HE1	TRP	A	38	152.577	11.718	1.783	1.00	0.00
ATOM 533	HE3	TRP	A	38	151.825	6.687	0.140	1.00	0.00
ATOM 534	HZ2	TRP	A	38	152.699	11.454	-1.027	1.00	0.00
ATOM 535	HZ3	TRP	A	38	152.087	7.398	-2.200	1.00	0.00
ATOM 536	HH2	TRP	A	38	152.516	9.733	-2.771	1.00	0.00
ATOM 537	N	ILE	A	39	148.781	8.374	1.963	1.00	0.00

ATOM 538	CA	ILE A	39	148.004	8.624	0.756	1.00	0.00
ATOM 539	C	ILE A	39	148.406	9.950	0.121	1.00	0.00
ATOM 540	O	ILE A	39	148.069	11.019	0.631	1.00	0.00
ATOM 541	CB	ILE A	39	146.492	8.645	1.051	1.00	0.00
ATOM 542	CG1	ILE A	39	146.088	7.406	1.853	1.00	0.00
ATOM 543	CG2	ILE A	39	145.699	8.725	-0.245	1.00	0.00
ATOM 544	CD1	ILE A	39	144.772	7.560	2.583	1.00	0.00
ATOM 545	H	ILE A	39	148.776	9.043	2.680	1.00	0.00
ATOM 546	HA	ILE A	39	148.205	7.824	0.056	1.00	0.00
ATOM 547	HB	ILE A	39	146.274	9.527	1.633	1.00	0.00
ATOM 548	1HG1	ILE A	39	145.997	6.564	1.182	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.852	7.195	2.587	1.00	0.00
ATOM 550	1HG2	ILE A	39	144.687	9.034	-0.029	1.00	0.00
ATOM 551	2HG2	ILE A	39	145.686	7.756	-0.720	1.00	0.00
ATOM 552	3HG2	ILE A	39	146.162	9.443	-0.905	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.751	8.514	3.089	1.00	0.00
ATOM 554	2HD1	ILE A	39	144.666	6.766	3.306	1.00	0.00
ATOM 555	3HD1	ILE A	39	143.960	7.512	1.874	1.00	0.00
ATOM 556	N	GLY A	40	149.135	9.876	-0.987	1.00	0.00
ATOM 557	CA	GLY A	40	149.575	11.083	-1.663	1.00	0.00
ATOM 558	C	GLY A	40	150.097	10.816	-3.060	1.00	0.00
ATOM 559	O	GLY A	40	149.921	9.724	-3.600	1.00	0.00
ATOM 560	H	GLY A	40	149.378	8.997	-1.348	1.00	0.00
ATOM 561	1HA	GLY A	40	148.745	11.769	-1.727	1.00	0.00
ATOM 562	2HA	GLY A	40	150.359	11.540	-1.079	1.00	0.00
ATOM 563	N	GLN A	41	150.741	11.820	-3.644	1.00	0.00
ATOM 564	CA	GLN A	41	151.294	11.701	-4.987	1.00	0.00
ATOM 565	C	GLN A	41	152.768	12.102	-5.001	1.00	0.00
ATOM 566	O	GLN A	41	153.105	13.259	-4.749	1.00	0.00

ATOM 567	CB	GLN A	41	150.504	12.581	-5.956	1.00	0.00
ATOM 568	CG	GLN A	41	148.998	12.402	-5.849	1.00	0.00
ATOM 569	CD	GLN A	41	148.246	13.712	-5.972	1.00	0.00
ATOM 570	OE1	GLN A	41	148.223	14.518	-5.040	1.00	0.00
ATOM 571	NE2	GLN A	41	147.627	13.933	-7.125	1.00	0.00
ATOM 572	H	GLN A	41	150.847	12.665	-3.160	1.00	0.00
ATOM 573	HA	GLN A	41	151.205	10.672	-5.295	1.00	0.00
ATOM 574	1HB	GLN A	41	150.737	13.616	-5.753	1.00	0.00
ATOM 575	2HB	GLN A	41	150.804	12.344	-6.964	1.00	0.00
ATOM 576	1HG	GLN A	41	148.670	11.741	-6.637	1.00	0.00
ATOM 577	2HG	GLN A	41	148.767	11.960	-4.891	1.00	0.00
ATOM 578	1HE2	GLN A	41	147.689	13.246	-7.822	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.135	14.773	-7.233	1.00	0.00
ATOM 580	N	PRO A	42	153.674	11.150	-5.295	1.00	0.00
ATOM 581	CA	PRO A	42	155.115	11.422	-5.336	1.00	0.00
ATOM 582	C	PRO A	42	155.468	12.529	-6.324	1.00	0.00
ATOM 583	O	PRO A	42	154.696	12.830	-7.233	1.00	0.00
ATOM 584	CB	PRO A	42	155.723	10.089	-5.787	1.00	0.00
ATOM 585	CG	PRO A	42	154.699	9.066	-5.440	1.00	0.00
ATOM 586	CD	PRO A	42	153.371	9.743	-5.609	1.00	0.00
ATOM 587	HA	PRO A	42	155.495	11.680	-4.358	1.00	0.00
ATOM 588	1HB	PRO A	42	155.909	10.118	-6.851	1.00	0.00
ATOM 589	2HB	PRO A	42	156.648	9.915	-5.259	1.00	0.00
ATOM 590	1HG	PRO A	42	154.778	8.222	-6.110	1.00	0.00
ATOM 591	2HG	PRO A	42	154.830	8.746	-4.416	1.00	0.00
ATOM 592	1HD	PRO A	42	153.021	9.641	-6.626	1.00	0.00
ATOM 593	2HD	PRO A	42	152.648	9.341	-4.916	1.00	0.00
ATOM 594	N	PRO A	43	156.647	13.151	-6.158	1.00	0.00
ATOM 595	CA	PRO A	43	157.102	14.228	-7.040	1.00	0.00

ATOM 596	C	PRO A	43	157.497	13.719	-8.421	1.00	0.00
ATOM 597	O	PRO A	43	158.662	13.408	-8.668	1.00	0.00
ATOM 598	CB	PRO A	43	158.322	14.792	-6.312	1.00	0.00
ATOM 599	CG	PRO A	43	158.835	13.657	-5.497	1.00	0.00
ATOM 600	CD	PRO A	43	157.629	12.850	-5.098	1.00	0.00
ATOM 601	HA	PRO A	43	156.351	14.999	-7.142	1.00	0.00
ATOM 602	1HB	PRO A	43	159.052	15.121	-7.037	1.00	0.00
ATOM 603	2HB	PRO A	43	158.023	15.622	-5.691	1.00	0.00
ATOM 604	1HG	PRO A	43	159.510	13.056	-6.088	1.00	0.00
ATOM 605	2HG	PRO A	43	159.339	14.035	-4.619	1.00	0.00
ATOM 606	1HD	PRO A	43	157.869	11.797	-5.082	1.00	0.00
ATOM 607	2HD	PRO A	43	157.264	13.170	-4.134	1.00	0.00
ATOM 608	N	GLY A	44	156.521	13.636	-9.317	1.00	0.00
ATOM 609	CA	GLY A	44	156.790	13.162	-10.661	1.00	0.00
ATOM 610	C	GLY A	44	155.552	12.623	-11.346	1.00	0.00
ATOM 611	O	GLY A	44	155.237	13.014	-12.471	1.00	0.00
ATOM 612	H	GLY A	44	155.610	13.897	-9.064	1.00	0.00
ATOM 613	1HA	GLY A	44	157.183	13.980	-11.245	1.00	0.00
ATOM 614	2HA	GLY A	44	157.532	12.380	-10.613	1.00	0.00
ATOM 615	N	LEU A	45	154.848	11.724	-10.670	1.00	0.00
ATOM 616	CA	LEU A	45	153.637	11.131	-11.224	1.00	0.00
ATOM 617	C	LEU A	45	152.440	11.401	-10.319	1.00	0.00
ATOM 618	O	LEU A	45	152.369	10.888	-9.203	1.00	0.00
ATOM 619	CB	LEU A	45	153.820	9.623	-11.409	1.00	0.00
ATOM 620	CG	LEU A	45	154.384	8.886	-10.192	1.00	0.00
ATOM 621	CD1	LEU A	45	154.025	7.407	-10.247	1.00	0.00
ATOM 622	CD2	LEU A	45	155.893	9.072	-10.107	1.00	0.00
ATOM 623	H	LEU A	45	155.148	11.452	-9.775	1.00	0.00
ATOM 624	HA	LEU A	45	153.455	11.583	-12.186	1.00	0.00



ATOM 625	1HB	LEU	A	45	152.860	9.192	-11.653	1.00	0.00
ATOM 626	2HB	LEU	A	45	154.490	9.462	-12.240	1.00	0.00
ATOM 627	HG	LEU	A	45	153.945	9.301	-9.295	1.00	0.00
ATOM 628	1HD1	LEU	A	45	153.490	7.134	-9.349	1.00	0.00
ATOM 629	2HD1	LEU	A	45	154.928	6.819	-10.320	1.00	0.00
ATOM 630	3HD1	LEU	A	45	153.402	7.218	-11.108	1.00	0.00
ATOM 631	1HD2	LEU	A	45	156.162	9.381	-9.108	1.00	0.00
ATOM 632	2HD2	LEU	A	45	156.205	9.827	-10.813	1.00	0.00
ATOM 633	3HD2	LEU	A	45	156.385	8.138	-10.339	1.00	0.00
ATOM 634	N	ASN	A	46	151.505	12.210	-10.803	1.00	0.00
ATOM 635	CA	ASN	A	46	150.318	12.539	-10.025	1.00	0.00
ATOM 636	C	ASN	A	46	149.367	11.349	-9.971	1.00	0.00
ATOM 637	O	ASN	A	46	148.723	11.008	-10.964	1.00	0.00
ATOM 638	CB	ASN	A	46	149.608	13.751	-10.630	1.00	0.00
ATOM 639	CG	ASN	A	46	148.879	14.574	-9.586	1.00	0.00
ATOM 640	OD1	ASN	A	46	147.654	14.691	-9.615	1.00	0.00
ATOM 641	ND2	ASN	A	46	149.632	15.152	-8.657	1.00	0.00
ATOM 642	H	ASN	A	46	151.613	12.592	-11.699	1.00	0.00
ATOM 643	HA	ASN	A	46	150.633	12.780	-9.020	1.00	0.00
ATOM 644	1HB	ASN	A	46	150.337	14.383	-11.114	1.00	0.00
ATOM 645	2HB	ASN	A	46	148.889	13.411	-11.361	1.00	0.00
ATOM 646	1HD2	ASN	A	46	150.602	15.015	-8.696	1.00	0.00
ATOM 647	2HD2	ASN	A	46	149.188	15.690	-7.970	1.00	0.00
ATOM 648	N	GLU	A	47	149.285	10.721	-8.804	1.00	0.00
ATOM 649	CA	GLU	A	47	148.415	9.568	-8.612	1.00	0.00
ATOM 650	C	GLU	A	47	148.262	9.248	-7.130	1.00	0.00
ATOM 651	O	GLU	A	47	149.245	8.978	-6.440	1.00	0.00
ATOM 652	CB	GLU	A	47	148.970	8.349	-9.354	1.00	0.00
ATOM 653	CG	GLU	A	47	150.485	8.230	-9.290	1.00	0.00

ATOM 654	CD	GLU A	47	151.036	7.254	-10.311	1.00	0.00
ATOM 655	OE1	GLU A	47	151.168	7.641	-11.491	1.00	0.00
ATOM 656	OE2	GLU A	47	151.336	6.103	-9.930	1.00	0.00
ATOM 657	H	GLU A	47	149.824	11.041	-8.052	1.00	0.00
ATOM 658	HA	GLU A	47	147.445	9.813	-9.017	1.00	0.00
ATOM 659	1HB	GLU A	47	148.543	7.455	-8.923	1.00	0.00
ATOM 660	2HB	GLU A	47	148.680	8.411	-10.392	1.00	0.00
ATOM 661	1HG	GLU A	47	150.917	9.201	-9.474	1.00	0.00
ATOM 662	2HG	GLU A	47	150.767	7.894	-8.303	1.00	0.00
ATOM 663	N	VAL A	48	147.026	9.273	-6.644	1.00	0.00
ATOM 664	CA	VAL A	48	146.758	8.977	-5.243	1.00	0.00
ATOM 665	C	VAL A	48	147.120	7.533	-4.918	1.00	0.00
ATOM 666	O	VAL A	48	146.338	6.615	-5.169	1.00	0.00
ATOM 667	CB	VAL A	48	145.279	9.219	-4.888	1.00	0.00
ATOM 668	CG1	VAL A	48	145.066	9.114	-3.386	1.00	0.00
ATOM 669	CG2	VAL A	48	144.820	10.574	-5.405	1.00	0.00
ATOM 670	H	VAL A	48	146.280	9.489	-7.241	1.00	0.00
ATOM 671	HA	VAL A	48	147.366	9.636	-4.640	1.00	0.00
ATOM 672	HB	VAL A	48	144.684	8.455	-5.368	1.00	0.00
ATOM 673	1HG1	VAL A	48	145.014	8.072	-3.102	1.00	0.00
ATOM 674	2HG1	VAL A	48	144.142	9.606	-3.117	1.00	0.00
ATOM 675	3HG1	VAL A	48	145.889	9.587	-2.872	1.00	0.00
ATOM 676	1HG2	VAL A	48	144.651	10.515	-6.470	1.00	0.00
ATOM 677	2HG2	VAL A	48	145.580	11.314	-5.202	1.00	0.00
ATOM 678	3HG2	VAL A	48	143.903	10.857	-4.910	1.00	0.00
ATOM 679	N	LEU A	49	148.309	7.339	-4.362	1.00	0.00
ATOM 680	CA	LEU A	49	148.777	6.005	-4.005	1.00	0.00
ATOM 681	C	LEU A	49	148.742	5.809	-2.496	1.00	0.00
ATOM 682	O	LEU A	49	149.455	6.486	-1.756	1.00	0.00

ATOM 683	CB	LEU A	49	150.197	5.781	-4.528	1.00	0.00
ATOM 684	CG	LEU A	49	150.343	5.837	-6.050	1.00	0.00
ATOM 685	CD1	LEU A	49	151.745	6.281	-6.435	1.00	0.00
ATOM 686	CD2	LEU A	49	150.022	4.483	-6.664	1.00	0.00
ATOM 687	H	LEU A	49	148.888	8.110	-4.186	1.00	0.00
ATOM 688	HA	LEU A	49	148.115	5.287	-4.466	1.00	0.00
ATOM 689	1HB	LEU A	49	150.840	6.535	-4.097	1.00	0.00
ATOM 690	2HB	LEU A	49	150.532	4.812	-4.192	1.00	0.00
ATOM 691	HG	LEU A	49	149.643	6.559	-6.446	1.00	0.00
ATOM 692	1HD1	LEU A	49	151.964	7.230	-5.968	1.00	0.00
ATOM 693	2HD1	LEU A	49	151.808	6.384	-7.507	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.461	5.543	-6.102	1.00	0.00
ATOM 695	1HD2	LEU A	49	149.950	4.582	-7.737	1.00	0.00
ATOM 696	2HD2	LEU A	49	149.083	4.122	-6.272	1.00	0.00
ATOM 697	3HD2	LEU A	49	150.807	3.782	-6.420	1.00	0.00
ATOM 698	N	ALA A	50	147.908	4.880	-2.044	1.00	0.00
ATOM 699	CA	ALA A	50	147.783	4.602	-0.621	1.00	0.00
ATOM 700	C	ALA A	50	148.733	3.488	-0.195	1.00	0.00
ATOM 701	O	ALA A	50	148.596	2.343	-0.625	1.00	0.00
ATOM 702	CB	ALA A	50	146.347	4.234	-0.280	1.00	0.00
ATOM 703	H	ALA A	50	147.363	4.374	-2.682	1.00	0.00
ATOM 704	HA	ALA A	50	148.036	5.505	-0.086	1.00	0.00
ATOM 705	1HB	ALA A	50	146.227	3.162	-0.329	1.00	0.00
ATOM 706	2HB	ALA A	50	145.677	4.704	-0.985	1.00	0.00
ATOM 707	3HB	ALA A	50	146.115	4.577	0.718	1.00	0.00
ATOM 708	N	GLY A	51	149.697	3.832	0.653	1.00	0.00
ATOM 709	CA	GLY A	51	150.656	2.850	1.123	1.00	0.00
ATOM 710	C	GLY A	51	150.023	1.805	2.019	1.00	0.00
ATOM 711	O	GLY A	51	149.665	2.092	3.162	1.00	0.00

ATOM 712	H	GLY A	51	149.757	4.759	0.962	1.00	0.00
ATOM 713	1HA	GLY A	51	151.098	2.357	0.270	1.00	0.00
ATOM 714	2HA	GLY A	51	151.434	3.357	1.674	1.00	0.00
ATOM 715	N	LEU A	52	149.882	0.589	1.501	1.00	0.00
ATOM 716	CA	LEU A	52	149.286	-0.502	2.264	1.00	0.00
ATOM 717	C	LEU A	52	150.362	-1.350	2.933	1.00	0.00
ATOM 718	O	LEU A	52	151.348	-1.734	2.303	1.00	0.00
ATOM 719	CB	LEU A	52	148.423	-1.376	1.353	1.00	0.00
ATOM 720	CG	LEU A	52	147.132	-0.721	0.860	1.00	0.00
ATOM 721	CD1	LEU A	52	146.434	-1.615	-0.154	1.00	0.00
ATOM 722	CD2	LEU A	52	146.209	-0.418	2.031	1.00	0.00
ATOM 723	H	LEU A	52	150.186	0.422	0.585	1.00	0.00
ATOM 724	HA	LEU A	52	148.660	-0.067	3.029	1.00	0.00
ATOM 725	1HB	LEU A	52	149.014	-1.654	0.492	1.00	0.00
ATOM 726	2HB	LEU A	52	148.162	-2.274	1.893	1.00	0.00
ATOM 727	HG	LEU A	52	147.372	0.212	0.373	1.00	0.00
ATOM 728	1HD1	LEU A	52	147.160	-2.260	-0.625	1.00	0.00
ATOM 729	2HD1	LEU A	52	145.957	-1.002	-0.905	1.00	0.00
ATOM 730	3HD1	LEU A	52	145.689	-2.215	0.348	1.00	0.00
ATOM 731	1HD2	LEU A	52	146.708	0.245	2.721	1.00	0.00
ATOM 732	2HD2	LEU A	52	145.955	-1.339	2.536	1.00	0.00
ATOM 733	3HD2	LEU A	52	145.308	0.053	1.666	1.00	0.00
ATOM 734	N	GLU A	53	150.166	-1.641	4.216	1.00	0.00
ATOM 735	CA	GLU A	53	151.119	-2.445	4.972	1.00	0.00
ATOM 736	C	GLU A	53	150.624	-3.880	5.117	1.00	0.00
ATOM 737	O	GLU A	53	149.715	-4.158	5.899	1.00	0.00
ATOM 738	CB	GLU A	53	151.353	-1.830	6.353	1.00	0.00
ATOM 739	CG	GLU A	53	152.363	-2.593	7.195	1.00	0.00
ATOM 740	CD	GLU A	53	151.997	-2.614	8.666	1.00	0.00

ATOM 741	OE1	GLU A	53	152.380	-3.580	9.360	1.00	0.00
ATOM 742	OE2	GLU A	53	151.327	-1.665	9.126	1.00	0.00
ATOM 743	H	GLU A	53	149.362	-1.306	4.663	1.00	0.00
ATOM 744	HA	GLU A	53	152.053	-2.451	4.428	1.00	0.00
ATOM 745	1HB	GLU A	53	151.710	-0.819	6.229	1.00	0.00
ATOM 746	2HB	GLU A	53	150.414	-1.808	6.887	1.00	0.00
ATOM 747	1HG	GLU A	53	152.415	-3.610	6.838	1.00	0.00
ATOM 748	2HG	GLU A	53	153.330	-2.124	7.086	1.00	0.00
ATOM 749	N	LEU A	54	151.229	-4.789	4.359	1.00	0.00
ATOM 750	CA	LEU A	54	150.850	-6.196	4.403	1.00	0.00
ATOM 751	C	LEU A	54	151.179	-6.805	5.763	1.00	0.00
ATOM 752	O	LEU A	54	152.268	-6.599	6.300	1.00	0.00
ATOM 753	CB	LEU A	54	151.564	-6.973	3.296	1.00	0.00
ATOM 754	CG	LEU A	54	151.397	-6.396	1.889	1.00	0.00
ATOM 755	CD1	LEU A	54	152.493	-6.907	0.968	1.00	0.00
ATOM 756	CD2	LEU A	54	150.025	-6.742	1.331	1.00	0.00
ATOM 757	H	LEU A	54	151.948	-4.506	3.755	1.00	0.00
ATOM 758	HA	LEU A	54	149.784	-6.257	4.244	1.00	0.00
ATOM 759	1HB	LEU A	54	152.618	-7.003	3.529	1.00	0.00
ATOM 760	2HB	LEU A	54	151.183	-7.984	3.293	1.00	0.00
ATOM 761	HG	LEU A	54	151.478	-5.319	1.938	1.00	0.00
ATOM 762	1HD1	LEU A	54	153.458	-6.635	1.372	1.00	0.00
ATOM 763	2HD1	LEU A	54	152.376	-6.467	-0.011	1.00	0.00
ATOM 764	3HD1	LEU A	54	152.426	-7.982	0.891	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.885	-7.812	1.357	1.00	0.00
ATOM 766	2HD2	LEU A	54	149.953	-6.394	0.312	1.00	0.00
ATOM 767	3HD2	LEU A	54	149.262	-6.266	1.929	1.00	0.00
ATOM 768	N	GLU A	55	150.231	-7.556	6.314	1.00	0.00
ATOM 769	CA	GLU A	55	150.420	-8.196	7.610	1.00	0.00

ATOM 770	C	GLU A	55	151.540	-9.230	7.551	1.00	0.00
ATOM 771	O	GLU A	55	152.232	-9.466	8.542	1.00	0.00
ATOM 772	CB	GLU A	55	149.120	-8.861	8.068	1.00	0.00
ATOM 773	CG	GLU A	55	148.144	-7.900	8.725	1.00	0.00
ATOM 774	CD	GLU A	55	148.143	-8.013	10.237	1.00	0.00
ATOM 775	OE1	GLU A	55	149.238	-7.979	10.837	1.00	0.00
ATOM 776	OE2	GLU A	55	147.046	-8.137	10.823	1.00	0.00
ATOM 777	H	GLU A	55	149.385	-7.684	5.837	1.00	0.00
ATOM 778	HA	GLU A	55	150.690	-7.429	8.321	1.00	0.00
ATOM 779	1HB	GLU A	55	148.635	-9.303	7.210	1.00	0.00
ATOM 780	2HB	GLU A	55	149.358	-9.639	8.778	1.00	0.00
ATOM 781	1HG	GLU A	55	148.415	-6.890	8.457	1.00	0.00
ATOM 782	2HG	GLU A	55	147.148	-8.113	8.362	1.00	0.00
ATOM 783	N	ASP A	56	151.713	-9.843	6.385	1.00	0.00
ATOM 784	CA	ASP A	56	152.748	-10.852	6.199	1.00	0.00
ATOM 785	C	ASP A	56	153.972	-10.256	5.509	1.00	0.00
ATOM 786	O	ASP A	56	153.857	-9.318	4.722	1.00	0.00
ATOM 787	CB	ASP A	56	152.207	-12.024	5.379	1.00	0.00
ATOM 788	CG	ASP A	56	152.759	-13.358	5.842	1.00	0.00
ATOM 789	OD1	ASP A	56	152.112	-14.007	6.689	1.00	0.00
ATOM 790	OD2	ASP A	56	153.839	-13.754	5.355	1.00	0.00
ATOM 791	H	ASP A	56	151.130	-9.612	5.632	1.00	0.00
ATOM 792	HA	ASP A	56	153.040	-11.212	7.174	1.00	0.00
ATOM 793	1HB	ASP A	56	151.131	-12.052	5.468	1.00	0.00
ATOM 794	2HB	ASP A	56	152.474	-11.884	4.341	1.00	0.00
ATOM 795	N	GLU A	57	155.142	-10.810	5.811	1.00	0.00
ATOM 796	CA	GLU A	57	156.387	-10.334	5.219	1.00	0.00
ATOM 797	C	GLU A	57	156.650	-11.019	3.882	1.00	0.00
ATOM 798	O	GLU A	57	156.986	-12.203	3.836	1.00	0.00

ATOM 799	CB	GLU A	57	157.558	-10.584	6.172	1.00	0.00
ATOM 800	CG	GLU A	57	157.490	-9.760	7.448	1.00	0.00
ATOM 801	CD	GLU A	57	158.429	-10.272	8.522	1.00	0.00
ATOM 802	OE1	GLU A	57	159.608	-10.536	8.205	1.00	0.00
ATOM 803	OE2	GLU A	57	157.985	-10.409	9.682	1.00	0.00
ATOM 804	H	GLU A	57	155.169	-11.556	6.445	1.00	0.00
ATOM 805	HA	GLU A	57	156.291	-9.272	5.053	1.00	0.00
ATOM 806	1HB	GLU A	57	157.567	-11.629	6.445	1.00	0.00
ATOM 807	2HB	GLU A	57	158.480	-10.345	5.663	1.00	0.00
ATOM 808	1HG	GLU A	57	157.756	-8.740	7.216	1.00	0.00
ATOM 809	2HG	GLU A	57	156.480	-9.791	7.828	1.00	0.00
ATOM 810	N	CYS A	58	156.495	-10.269	2.797	1.00	0.00
ATOM 811	CA	CYS A	58	156.716	-10.804	1.459	1.00	0.00
ATOM 812	C	CYS A	58	157.997	-10.242	0.851	1.00	0.00
ATOM 813	O	CYS A	58	158.317	-9.067	1.030	1.00	0.00
ATOM 814	CB	CYS A	58	155.524	-10.482	0.554	1.00	0.00
ATOM 815	SG	CYS A	58	154.176	-11.683	0.653	1.00	0.00
ATOM 816	H	CYS A	58	156.226	-9.331	2.898	1.00	0.00
ATOM 817	HA	CYS A	58	156.812	-11.877	1.542	1.00	0.00
ATOM 818	1HB	CYS A	58	155.125	-9.517	0.830	1.00	0.00
ATOM 819	2HB	CYS A	58	155.861	-10.447	-0.472	1.00	0.00
ATOM 820	HG	CYS A	58	154.554	-12.533	0.888	1.00	0.00
ATOM 821	N	ALA A	59	158.726	-11.089	0.133	1.00	0.00
ATOM 822	CA	ALA A	59	159.972	-10.677	-0.502	1.00	0.00
ATOM 823	C	ALA A	59	159.708	-9.725	-1.664	1.00	0.00
ATOM 824	O	ALA A	59	159.129	-10.113	-2.678	1.00	0.00
ATOM 825	CB	ALA A	59	160.747	-11.895	-0.981	1.00	0.00
ATOM 826	H	ALA A	59	158.418	-12.014	0.026	1.00	0.00
ATOM 827	HA	ALA A	59	160.570	-10.168	0.239	1.00	0.00

ATOM 828	1HB	ALA	A	59	161.352	-11.625	-1.834	1.00	0.00
ATOM 829	2HB	ALA	A	59	160.054	-12.674	-1.265	1.00	0.00
ATOM 830	3HB	ALA	A	59	161.385	-12.252	-0.186	1.00	0.00
ATOM 831	N	GLY	A	60	160.136	-8.476	-1.508	1.00	0.00
ATOM 832	CA	GLY	A	60	159.937	-7.489	-2.551	1.00	0.00
ATOM 833	C	GLY	A	60	159.402	-6.175	-2.012	1.00	0.00
ATOM 834	O	GLY	A	60	159.649	-5.115	-2.587	1.00	0.00
ATOM 835	H	GLY	A	60	160.591	-8.225	-0.677	1.00	0.00
ATOM 836	1HA	GLY	A	60	160.880	-7.305	-3.044	1.00	0.00
ATOM 837	2HA	GLY	A	60	159.236	-7.880	-3.274	1.00	0.00
ATOM 838	N	CYS	A	61	158.669	-6.247	-0.907	1.00	0.00
ATOM 839	CA	CYS	A	61	158.098	-5.055	-0.290	1.00	0.00
ATOM 840	C	CYS	A	61	159.175	-4.242	0.422	1.00	0.00
ATOM 841	O	CYS	A	61	160.259	-4.749	0.712	1.00	0.00
ATOM 842	CB	CYS	A	61	156.999	-5.444	0.700	1.00	0.00
ATOM 843	SG	CYS	A	61	155.806	-6.635	0.046	1.00	0.00
ATOM 844	H	CYS	A	61	158.508	-7.121	-0.495	1.00	0.00
ATOM 845	HA	CYS	A	61	157.667	-4.450	-1.074	1.00	0.00
ATOM 846	1HB	CYS	A	61	157.452	-5.882	1.576	1.00	0.00
ATOM 847	2HB	CYS	A	61	156.453	-4.556	0.988	1.00	0.00
ATOM 848	HG	CYS	A	61	156.257	-7.181	-0.602	1.00	0.00
ATOM 849	N	THR	A	62	158.869	-2.979	0.700	1.00	0.00
ATOM 850	CA	THR	A	62	159.811	-2.096	1.378	1.00	0.00
ATOM 851	C	THR	A	62	159.450	-1.944	2.852	1.00	0.00
ATOM 852	O	THR	A	62	158.508	-2.571	3.338	1.00	0.00
ATOM 853	CB	THR	A	62	159.834	-0.725	0.702	1.00	0.00
ATOM 854	OG1	THR	A	62	158.569	-0.422	0.140	1.00	0.00
ATOM 855	CG2	THR	A	62	160.865	-0.617	-0.400	1.00	0.00
ATOM 856	H	THR	A	62	157.989	-2.632	0.443	1.00	0.00



ATOM 857	HA	THR A	62	160.793	-2.540	1.305	1.00	0.00
ATOM 858	HB	THR A	62	160.063	0.027	1.444	1.00	0.00
ATOM 859	HG1	THR A	62	158.577	0.476	-0.200	1.00	0.00
ATOM 860	1HG2	THR A	62	161.107	0.422	-0.567	1.00	0.00
ATOM 861	2HG2	THR A	62	160.466	-1.044	-1.309	1.00	0.00
ATOM 862	3HG2	THR A	62	161.757	-1.153	-0.112	1.00	0.00
ATOM 863	N	ASP A	63	160.204	-1.108	3.557	1.00	0.00
ATOM 864	CA	ASP A	63	159.963	-0.873	4.977	1.00	0.00
ATOM 865	C	ASP A	63	159.263	0.463	5.197	1.00	0.00
ATOM 866	O	ASP A	63	159.501	1.144	6.194	1.00	0.00
ATOM 867	CB	ASP A	63	161.283	-0.905	5.752	1.00	0.00
ATOM 868	CG	ASP A	63	162.354	-0.050	5.104	1.00	0.00
ATOM 869	OD1	ASP A	63	163.372	-0.615	4.652	1.00	0.00
ATOM 870	OD2	ASP A	63	162.175	1.185	5.048	1.00	0.00
ATOM 871	H	ASP A	63	160.940	-0.637	3.114	1.00	0.00
ATOM 872	HA	ASP A	63	159.324	-1.665	5.339	1.00	0.00
ATOM 873	1HB	ASP A	63	161.114	-0.538	6.753	1.00	0.00
ATOM 874	2HB	ASP A	63	161.640	-1.922	5.800	1.00	0.00
ATOM 875	N	GLY A	64	158.398	0.833	4.258	1.00	0.00
ATOM 876	CA	GLY A	64	157.676	2.087	4.367	1.00	0.00
ATOM 877	C	GLY A	64	158.318	3.199	3.562	1.00	0.00
ATOM 878	O	GLY A	64	158.413	4.336	4.025	1.00	0.00
ATOM 879	H	GLY A	64	158.249	0.250	3.485	1.00	0.00
ATOM 880	1HA	GLY A	64	156.666	1.940	4.016	1.00	0.00
ATOM 881	2HA	GLY A	64	157.644	2.382	5.406	1.00	0.00
ATOM 882	N	THR A	65	158.763	2.871	2.353	1.00	0.00
ATOM 883	CA	THR A	65	159.400	3.850	1.481	1.00	0.00
ATOM 884	C	THR A	65	159.035	3.600	0.022	1.00	0.00
ATOM 885	O	THR A	65	159.312	2.531	-0.524	1.00	0.00

ATOM 886	CB	THR A	65	160.919	3.805	1.652	1.00	0.00
ATOM 887	OG1	THR A	65	161.395	2.473	1.559	1.00	0.00
ATOM 888	CG2	THR A	65	161.390	4.368	2.976	1.00	0.00
ATOM 889	H	THR A	65	158.659	1.948	2.040	1.00	0.00
ATOM 890	HA	THR A	65	159.044	4.829	1.766	1.00	0.00
ATOM 891	HB	THR A	65	161.377	4.385	0.865	1.00	0.00
ATOM 892	HG1	THR A	65	161.050	2.065	0.762	1.00	0.00
ATOM 893	1HG2	THR A	65	160.959	5.348	3.123	1.00	0.00
ATOM 894	2HG2	THR A	65	162.466	4.445	2.972	1.00	0.00
ATOM 895	3HG2	THR A	65	161.078	3.714	3.777	1.00	0.00
ATOM 896	N	PHE A	66	158.411	4.591	-0.606	1.00	0.00
ATOM 897	CA	PHE A	66	158.008	4.479	-2.003	1.00	0.00
ATOM 898	C	PHE A	66	159.094	5.022	-2.927	1.00	0.00
ATOM 899	O	PHE A	66	159.201	6.230	-3.130	1.00	0.00
ATOM 900	CB	PHE A	66	156.697	5.230	-2.241	1.00	0.00
ATOM 901	CG	PHE A	66	156.012	4.848	-3.522	1.00	0.00
ATOM 902	CD1	PHE A	66	155.529	5.822	-4.381	1.00	0.00
ATOM 903	CD2	PHE A	66	155.849	3.516	-3.865	1.00	0.00
ATOM 904	CE1	PHE A	66	154.899	5.474	-5.560	1.00	0.00
ATOM 905	CE2	PHE A	66	155.218	3.161	-5.042	1.00	0.00
ATOM 906	CZ	PHE A	66	154.742	4.141	-5.892	1.00	0.00
ATOM 907	H	PHE A	66	158.218	5.419	-0.118	1.00	0.00
ATOM 908	HA	PHE A	66	157.857	3.432	-2.220	1.00	0.00
ATOM 909	1HB	PHE A	66	156.019	5.023	-1.427	1.00	0.00
ATOM 910	2HB	PHE A	66	156.900	6.290	-2.274	1.00	0.00
ATOM 911	HD1	PHE A	66	155.652	6.864	-4.124	1.00	0.00
ATOM 912	HD2	PHE A	66	156.220	2.748	-3.202	1.00	0.00
ATOM 913	HE1	PHE A	66	154.528	6.242	-6.223	1.00	0.00
ATOM 914	HE2	PHE A	66	155.098	2.119	-5.299	1.00	0.00

ATOM 915	HZ	PHE A	66	154.250	3.867	-6.812	1.00	0.00
ATOM 916	N	ARG A	67	159.896	4.119	-3.483	1.00	0.00
ATOM 917	CA	ARG A	67	160.973	4.509	-4.386	1.00	0.00
ATOM 918	C	ARG A	67	161.960	5.438	-3.686	1.00	0.00
ATOM 919	O	ARG A	67	162.592	6.281	-4.322	1.00	0.00
ATOM 920	CB	ARG A	67	160.404	5.194	-5.629	1.00	0.00
ATOM 921	CG	ARG A	67	159.247	4.438	-6.263	1.00	0.00
ATOM 922	CD	ARG A	67	158.335	5.371	-7.047	1.00	0.00
ATOM 923	NE	ARG A	67	158.608	5.327	-8.481	1.00	0.00
ATOM 924	CZ	ARG A	67	158.258	4.314	-9.271	1.00	0.00
ATOM 925	NH1	ARG A	67	157.622	3.261	-8.771	1.00	0.00
ATOM 926	NH2	ARG A	67	158.544	4.354	-10.566	1.00	0.00
ATOM 927	H	ARG A	67	159.759	3.170	-3.282	1.00	0.00
ATOM 928	HA	ARG A	67	161.493	3.612	-4.686	1.00	0.00
ATOM 929	1HB	ARG A	67	160.055	6.179	-5.355	1.00	0.00
ATOM 930	2HB	ARG A	67	161.188	5.290	-6.365	1.00	0.00
ATOM 931	1HG	ARG A	67	159.642	3.691	-6.935	1.00	0.00
ATOM 932	2HG	ARG A	67	158.673	3.959	-5.484	1.00	0.00
ATOM 933	1HD	ARG A	67	157.310	5.077	-6.876	1.00	0.00
ATOM 934	2HD	ARG A	67	158.483	6.380	-6.691	1.00	0.00
ATOM 935	HE	ARG A	67	159.077	6.091	-8.876	1.00	0.00
ATOM 936	1HH1	ARG A	67	157.403	3.225	-7.795	1.00	0.00
ATOM 937	2HH1	ARG A	67	157.361	2.504	-9.370	1.00	0.00
ATOM 938	1HH2	ARG A	67	159.022	5.145	-10.947	1.00	0.00
ATOM 939	2HH2	ARG A	67	158.282	3.594	-11.159	1.00	0.00
ATOM 940	N	GLY A	68	162.086	5.279	-2.372	1.00	0.00
ATOM 941	CA	GLY A	68	162.998	6.111	-1.610	1.00	0.00
ATOM 942	C	GLY A	68	162.279	7.180	-0.808	1.00	0.00
ATOM 943	O	GLY A	68	162.795	7.658	0.202	1.00	0.00

ATOM 944	H	GLY A	68	161.558	4.591	-1.917	1.00	0.00
ATOM 945	1HA	GLY A	68	163.558	5.485	-0.931	1.00	0.00
ATOM 946	2HA	GLY A	68	163.686	6.590	-2.291	1.00	0.00
ATOM 947	N	THR A	69	161.086	7.556	-1.260	1.00	0.00
ATOM 948	CA	THR A	69	160.299	8.575	-0.576	1.00	0.00
ATOM 949	C	THR A	69	159.624	8.002	0.666	1.00	0.00
ATOM 950	O	THR A	69	158.538	7.428	0.585	1.00	0.00
ATOM 951	CB	THR A	69	159.245	9.152	-1.523	1.00	0.00
ATOM 952	OG1	THR A	69	159.760	9.271	-2.836	1.00	0.00
ATOM 953	CG2	THR A	69	158.746	10.518	-1.101	1.00	0.00
ATOM 954	H	THR A	69	160.728	7.138	-2.070	1.00	0.00
ATOM 955	HA	THR A	69	160.969	9.365	-0.275	1.00	0.00
ATOM 956	HB	THR A	69	158.396	8.484	-1.549	1.00	0.00
ATOM 957	HG1	THR A	69	159.603	8.454	-3.317	1.00	0.00
ATOM 958	1HG2	THR A	69	157.684	10.586	-1.285	1.00	0.00
ATOM 959	2HG2	THR A	69	159.259	11.280	-1.670	1.00	0.00
ATOM 960	3HG2	THR A	69	158.939	10.663	-0.048	1.00	0.00
ATOM 961	N	ARG A	70	160.275	8.161	1.813	1.00	0.00
ATOM 962	CA	ARG A	70	159.738	7.659	3.073	1.00	0.00
ATOM 963	C	ARG A	70	158.513	8.463	3.499	1.00	0.00
ATOM 964	O	ARG A	70	158.554	9.692	3.554	1.00	0.00
ATOM 965	CB	ARG A	70	160.806	7.716	4.166	1.00	0.00
ATOM 966	CG	ARG A	70	160.332	7.181	5.508	1.00	0.00
ATOM 967	CD	ARG A	70	160.920	7.975	6.663	1.00	0.00
ATOM 968	NE	ARG A	70	162.233	7.472	7.062	1.00	0.00
ATOM 969	CZ	ARG A	70	163.084	8.150	7.828	1.00	0.00
ATOM 970	NH1	ARG A	70	162.766	9.356	8.281	1.00	0.00
ATOM 971	NH2	ARG A	70	164.258	7.619	8.143	1.00	0.00
ATOM 972	H	ARG A	70	161.137	8.627	1.813	1.00	0.00

ATOM 973	HA	ARG A	70	159.444	6.631	2.921	1.00	0.00
ATOM 974	1HB	ARG A	70	161.659	7.134	3.851	1.00	0.00
ATOM 975	2HB	ARG A	70	161.112	8.743	4.300	1.00	0.00
ATOM 976	1HG	ARG A	70	159.255	7.245	5.551	1.00	0.00
ATOM 977	2HG	ARG A	70	160.636	6.149	5.600	1.00	0.00
ATOM 978	1HD	ARG A	70	161.017	9.007	6.361	1.00	0.00
ATOM 979	2HD	ARG A	70	160.248	7.909	7.506	1.00	0.00
ATOM 980	HE	ARG A	70	162.494	6.584	6.741	1.00	0.00
ATOM 981	1HH1	ARG A	70	161.882	9.762	8.048	1.00	0.00
ATOM 982	2HH1	ARG A	70	163.409	9.859	8.857	1.00	0.00
ATOM 983	1HH2	ARG A	70	164.503	6.711	7.805	1.00	0.00
ATOM 984	2HH2	ARG A	70	164.898	8.127	8.720	1.00	0.00
ATOM 985	N	TYR A	71	157.426	7.760	3.799	1.00	0.00
ATOM 986	CA	TYR A	71	156.189	8.408	4.220	1.00	0.00
ATOM 987	C	TYR A	71	155.841	8.032	5.657	1.00	0.00
ATOM 988	O	TYR A	71	155.425	8.880	6.447	1.00	0.00
ATOM 989	CB	TYR A	71	155.042	8.019	3.287	1.00	0.00
ATOM 990	CG	TYR A	71	155.198	8.551	1.879	1.00	0.00
ATOM 991	CD1	TYR A	71	155.353	7.686	0.804	1.00	0.00
ATOM 992	CD2	TYR A	71	155.192	9.917	1.628	1.00	0.00
ATOM 993	CE1	TYR A	71	155.496	8.168	-0.485	1.00	0.00
ATOM 994	CE2	TYR A	71	155.334	10.406	0.343	1.00	0.00
ATOM 995	CZ	TYR A	71	155.486	9.528	-0.709	1.00	0.00
ATOM 996	OH	TYR A	71	155.628	10.012	-1.989	1.00	0.00
ATOM 997	H	TYR A	71	157.456	6.783	3.735	1.00	0.00
ATOM 998	HA	TYR A	71	156.339	9.476	4.167	1.00	0.00
ATOM 999	1HB	TYR A	71	154.983	6.943	3.229	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.116	8.405	3.687	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.360	6.621	0.982	1.00	0.00

ATOM 1002	HD2	TYR A	71	155.073	10.603	2.454	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.615	7.480	-1.308	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.326	11.472	0.168	1.00	0.00
ATOM 1005	HH	TYR A	71	154.788	10.360	-2.295	1.00	0.00
ATOM 1006	N	PHE A	72	156.013	6.757	5.987	1.00	0.00
ATOM 1007	CA	PHE A	72	155.716	6.268	7.329	1.00	0.00
ATOM 1008	C	PHE A	72	156.781	5.282	7.797	1.00	0.00
ATOM 1009	O	PHE A	72	157.740	5.001	7.079	1.00	0.00
ATOM 1010	CB	PHE A	72	154.339	5.603	7.358	1.00	0.00
ATOM 1011	CG	PHE A	72	154.122	4.623	6.241	1.00	0.00
ATOM 1012	CD1	PHE A	72	154.270	3.261	6.457	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.771	5.062	4.974	1.00	0.00
ATOM 1014	CE1	PHE A	72	154.071	2.357	5.431	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.570	4.163	3.944	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.720	2.809	4.173	1.00	0.00
ATOM 1017	H	PHE A	72	156.346	6.129	5.313	1.00	0.00
ATOM 1018	HA	PHE A	72	155.710	7.117	7.997	1.00	0.00
ATOM 1019	1HB	PHE A	72	154.223	5.072	8.291	1.00	0.00
ATOM 1020	2HB	PHE A	72	153.578	6.365	7.285	1.00	0.00
ATOM 1021	HD1	PHE A	72	154.543	2.908	7.440	1.00	0.00
ATOM 1022	HD2	PHE A	72	153.653	6.120	4.795	1.00	0.00
ATOM 1023	HE1	PHE A	72	154.190	1.300	5.612	1.00	0.00
ATOM 1024	HE2	PHE A	72	153.297	4.519	2.962	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.564	2.104	3.370	1.00	0.00
ATOM 1026	N	THR A	73	156.605	4.760	9.007	1.00	0.00
ATOM 1027	CA	THR A	73	157.551	3.805	9.573	1.00	0.00
ATOM 1028	C	THR A	73	156.871	2.469	9.856	1.00	0.00
ATOM 1029	O	THR A	73	156.113	2.338	10.817	1.00	0.00
ATOM 1030	CB	THR A	73	158.162	4.361	10.860	1.00	0.00

ATOM 1031	OG1	THR A	73	157.244	5.211	11.525	1.00	0.00
ATOM 1032	CG2	THR A	73	159.432	5.152	10.626	1.00	0.00
ATOM 1033	H	THR A	73	155.821	5.023	9.533	1.00	0.00
ATOM 1034	HA	THR A	73	158.337	3.648	8.850	1.00	0.00
ATOM 1035	HB	THR A	73	158.401	3.539	11.518	1.00	0.00
ATOM 1036	HG1	THR A	73	156.707	4.692	12.128	1.00	0.00
ATOM 1037	1HG2	THR A	73	159.457	5.998	11.296	1.00	0.00
ATOM 1038	2HG2	THR A	73	159.456	5.500	9.604	1.00	0.00
ATOM 1039	3HG2	THR A	73	160.288	4.521	10.812	1.00	0.00
ATOM 1040	N	CYS A	74	157.149	1.479	9.013	1.00	0.00
ATOM 1041	CA	CYS A	74	156.565	0.153	9.173	1.00	0.00
ATOM 1042	C	CYS A	74	157.648	-0.922	9.171	1.00	0.00
ATOM 1043	O	CYS A	74	158.817	-0.639	8.913	1.00	0.00
ATOM 1044	CB	CYS A	74	155.556	-0.121	8.056	1.00	0.00
ATOM 1045	SG	CYS A	74	153.872	0.415	8.436	1.00	0.00
ATOM 1046	H	CYS A	74	157.762	1.645	8.266	1.00	0.00
ATOM 1047	HA	CYS A	74	156.052	0.128	10.122	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.871	0.396	7.162	1.00	0.00
ATOM 1049	2HB	CYS A	74	155.527	-1.183	7.860	1.00	0.00
ATOM 1050	HG	CYS A	74	153.370	-0.356	8.709	1.00	0.00
ATOM 1051	N	ALA A	75	157.249	-2.157	9.460	1.00	0.00
ATOM 1052	CA	ALA A	75	158.185	-3.274	9.491	1.00	0.00
ATOM 1053	C	ALA A	75	158.860	-3.461	8.137	1.00	0.00
ATOM 1054	O	ALA A	75	158.563	-2.747	7.180	1.00	0.00
ATOM 1055	CB	ALA A	75	157.469	-4.549	9.908	1.00	0.00
ATOM 1056	H	ALA A	75	156.303	-2.320	9.657	1.00	0.00
ATOM 1057	HA	ALA A	75	158.940	-3.054	10.232	1.00	0.00
ATOM 1058	1HB	ALA A	75	156.425	-4.479	9.643	1.00	0.00
ATOM 1059	2HB	ALA A	75	157.562	-4.681	10.976	1.00	0.00

ATOM 1060	3HB	ALA A	75	157.913	-5.393	9.401	1.00	0.00
ATOM 1061	N	LEU A	76	159.770	-4.427	8.064	1.00	0.00
ATOM 1062	CA	LEU A	76	160.488	-4.709	6.827	1.00	0.00
ATOM 1063	C	LEU A	76	159.705	-5.684	5.953	1.00	0.00
ATOM 1064	O	LEU A	76	159.141	-6.660	6.447	1.00	0.00
ATOM 1065	CB	LEU A	76	161.873	-5.281	7.135	1.00	0.00
ATOM 1066	CG	LEU A	76	162.966	-4.238	7.375	1.00	0.00
ATOM 1067	CD1	LEU A	76	164.095	-4.830	8.205	1.00	0.00
ATOM 1068	CD2	LEU A	76	163.495	-3.708	6.051	1.00	0.00
ATOM 1069	H	LEU A	76	159.964	-4.963	8.862	1.00	0.00
ATOM 1070	HA	LEU A	76	160.604	-3.778	6.292	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.795	-5.901	8.016	1.00	0.00
ATOM 1072	2HB	LEU A	76	162.176	-5.901	6.305	1.00	0.00
ATOM 1073	HG	LEU A	76	162.547	-3.408	7.926	1.00	0.00
ATOM 1074	1HD1	LEU A	76	164.504	-4.068	8.851	1.00	0.00
ATOM 1075	2HD1	LEU A	76	164.869	-5.199	7.548	1.00	0.00
ATOM 1076	3HD1	LEU A	76	163.713	-5.643	8.803	1.00	0.00
ATOM 1077	1HD2	LEU A	76	163.973	-2.752	6.212	1.00	0.00
ATOM 1078	2HD2	LEU A	76	162.676	-3.589	5.357	1.00	0.00
ATOM 1079	3HD2	LEU A	76	164.213	-4.406	5.645	1.00	0.00
ATOM 1080	N	LYS A	77	159.676	-5.413	4.652	1.00	0.00
ATOM 1081	CA	LYS A	77	158.962	-6.266	3.709	1.00	0.00
ATOM 1082	C	LYS A	77	157.473	-6.313	4.036	1.00	0.00
ATOM 1083	O	LYS A	77	156.840	-7.365	3.949	1.00	0.00
ATOM 1084	CB	LYS A	77	159.546	-7.681	3.727	1.00	0.00
ATOM 1085	CG	LYS A	77	161.022	-7.735	3.366	1.00	0.00
ATOM 1086	CD	LYS A	77	161.222	-7.948	1.874	1.00	0.00
ATOM 1087	CE	LYS A	77	162.466	-7.232	1.372	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.176	-8.018	0.325	1.00	0.00



ATOM 1089	H	LYS A	77	160.145	-4.620	4.319	1.00	0.00
ATOM 1090	HA	LYS A	77	159.089	-5.848	2.722	1.00	0.00
ATOM 1091	1HB	LYS A	77	159.425	-8.095	4.717	1.00	0.00
ATOM 1092	2HB	LYS A	77	159.002	-8.292	3.022	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.487	-6.804	3.653	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.484	-8.552	3.902	1.00	0.00
ATOM 1095	1HD	LYS A	77	161.325	-9.005	1.681	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.360	-7.566	1.347	1.00	0.00
ATOM 1097	1HE	LYS A	77	162.174	-6.278	0.956	1.00	0.00
ATOM 1098	2HE	LYS A	77	163.133	-7.070	2.205	1.00	0.00
ATOM 1099	1HZ	LYS A	77	162.881	-7.702	-0.620	1.00	0.00
ATOM 1100	2HZ	LYS A	77	162.953	-9.029	0.426	1.00	0.00
ATOM 1101	3HZ	LYS A	77	164.204	-7.890	0.418	1.00	0.00
ATOM 1102	N	LYS A	78	156.919	-5.165	4.412	1.00	0.00
ATOM 1103	CA	LYS A	78	155.503	-5.075	4.751	1.00	0.00
ATOM 1104	C	LYS A	78	154.937	-3.711	4.366	1.00	0.00
ATOM 1105	O	LYS A	78	154.084	-3.163	5.064	1.00	0.00
ATOM 1106	CB	LYS A	78	155.299	-5.322	6.246	1.00	0.00
ATOM 1107	CG	LYS A	78	155.835	-6.663	6.719	1.00	0.00
ATOM 1108	CD	LYS A	78	155.588	-6.870	8.205	1.00	0.00
ATOM 1109	CE	LYS A	78	154.371	-7.748	8.450	1.00	0.00
ATOM 1110	NZ	LYS A	78	153.592	-7.299	9.636	1.00	0.00
ATOM 1111	H	LYS A	78	157.475	-4.359	4.462	1.00	0.00
ATOM 1112	HA	LYS A	78	154.980	-5.838	4.193	1.00	0.00
ATOM 1113	1HB	LYS A	78	155.801	-4.543	6.800	1.00	0.00
ATOM 1114	2HB	LYS A	78	154.242	-5.284	6.464	1.00	0.00
ATOM 1115	1HG	LYS A	78	155.342	-7.451	6.169	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.898	-6.702	6.531	1.00	0.00
ATOM 1117	1HD	LYS A	78	156.454	-7.342	8.641	1.00	0.00

ATOM 1118	2HD	LYS A	78	155.426	-5.908	8.669	1.00	0.00
ATOM 1119	1HE	LYS A	78	153.736	-7.712	7.578	1.00	0.00
ATOM 1120	2HE	LYS A	78	154.703	-8.764	8.611	1.00	0.00
ATOM 1121	1HZ	LYS A	78	154.204	-6.763	10.284	1.00	0.00
ATOM 1122	2HZ	LYS A	78	153.207	-8.121	10.144	1.00	0.00
ATOM 1123	3HZ	LYS A	78	152.803	-6.691	9.336	1.00	0.00
ATOM 1124	N	ALA A	79	155.417	-3.170	3.252	1.00	0.00
ATOM 1125	CA	ALA A	79	154.959	-1.871	2.774	1.00	0.00
ATOM 1126	C	ALA A	79	154.768	-1.878	1.261	1.00	0.00
ATOM 1127	O	ALA A	79	155.729	-1.743	0.504	1.00	0.00
ATOM 1128	CB	ALA A	79	155.942	-0.784	3.179	1.00	0.00
ATOM 1129	H	ALA A	79	156.096	-3.655	2.738	1.00	0.00
ATOM 1130	HA	ALA A	79	154.010	-1.659	3.246	1.00	0.00
ATOM 1131	1HB	ALA A	79	155.400	0.113	3.442	1.00	0.00
ATOM 1132	2HB	ALA A	79	156.607	-0.573	2.354	1.00	0.00
ATOM 1133	3HB	ALA A	79	156.519	-1.117	4.028	1.00	0.00
ATOM 1134	N	LEU A	80	153.522	-2.038	0.829	1.00	0.00
ATOM 1135	CA	LEU A	80	153.204	-2.063	-0.595	1.00	0.00
ATOM 1136	C	LEU A	80	152.375	-0.846	-0.989	1.00	0.00
ATOM 1137	O	LEU A	80	151.319	-0.587	-0.410	1.00	0.00
ATOM 1138	CB	LEU A	80	152.448	-3.345	-0.947	1.00	0.00
ATOM 1139	CG	LEU A	80	152.015	-3.461	-2.409	1.00	0.00
ATOM 1140	CD1	LEU A	80	153.127	-4.072	-3.247	1.00	0.00
ATOM 1141	CD2	LEU A	80	150.742	-4.287	-2.524	1.00	0.00
ATOM 1142	H	LEU A	80	152.798	-2.140	1.481	1.00	0.00
ATOM 1143	HA	LEU A	80	154.135	-2.042	-1.143	1.00	0.00
ATOM 1144	1HB	LEU A	80	153.083	-4.188	-0.712	1.00	0.00
ATOM 1145	2HB	LEU A	80	151.565	-3.399	-0.328	1.00	0.00
ATOM 1146	HG	LEU A	80	151.811	-2.473	-2.795	1.00	0.00

ATOM 1147	1HD1	LEU A	80	153.127	-3.621	-4.229	1.00	0.00
ATOM 1148	2HD1	LEU A	80	152.964	-5.136	-3.340	1.00	0.00
ATOM 1149	3HD1	LEU A	80	154.078	-3.894	-2.769	1.00	0.00
ATOM 1150	1HD2	LEU A	80	150.387	-4.261	-3.543	1.00	0.00
ATOM 1151	2HD2	LEU A	80	149.988	-3.878	-1.868	1.00	0.00
ATOM 1152	3HD2	LEU A	80	150.950	-5.308	-2.240	1.00	0.00
ATOM 1153	N	PHE A	81	152.859	-0.100	-1.976	1.00	0.00
ATOM 1154	CA	PHE A	81	152.162	1.091	-2.449	1.00	0.00
ATOM 1155	C	PHE A	81	151.323	0.776	-3.683	1.00	0.00
ATOM 1156	O	PHE A	81	151.796	0.136	-4.621	1.00	0.00
ATOM 1157	CB	PHE A	81	153.164	2.201	-2.768	1.00	0.00
ATOM 1158	CG	PHE A	81	153.781	2.823	-1.548	1.00	0.00
ATOM 1159	CD1	PHE A	81	154.882	2.242	-0.940	1.00	0.00
ATOM 1160	CD2	PHE A	81	153.260	3.988	-1.009	1.00	0.00
ATOM 1161	CE1	PHE A	81	155.453	2.812	0.182	1.00	0.00
ATOM 1162	CE2	PHE A	81	153.826	4.563	0.113	1.00	0.00
ATOM 1163	CZ	PHE A	81	154.924	3.973	0.710	1.00	0.00
ATOM 1164	H	PHE A	81	153.705	-0.357	-2.399	1.00	0.00
ATOM 1165	HA	PHE A	81	151.507	1.426	-1.658	1.00	0.00
ATOM 1166	1HB	PHE A	81	153.961	1.794	-3.372	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.662	2.981	-3.323	1.00	0.00
ATOM 1168	HD1	PHE A	81	155.297	1.334	-1.352	1.00	0.00
ATOM 1169	HD2	PHE A	81	152.401	4.449	-1.475	1.00	0.00
ATOM 1170	HE1	PHE A	81	156.311	2.349	0.646	1.00	0.00
ATOM 1171	HE2	PHE A	81	153.410	5.471	0.523	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.368	4.421	1.586	1.00	0.00
ATOM 1173	N	VAL A	82	150.074	1.230	-3.674	1.00	0.00
ATOM 1174	CA	VAL A	82	149.168	0.997	-4.793	1.00	0.00
ATOM 1175	C	VAL A	82	148.207	2.167	-4.975	1.00	0.00

ATOM 1176	O	VAL A	82	148.090	3.029	-4.105	1.00	0.00
ATOM 1177	CB	VAL A	82	148.354	-0.295	-4.597	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.264	-1.512	-4.631	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.570	-0.241	-3.294	1.00	0.00
ATOM 1180	H	VAL A	82	149.753	1.734	-2.896	1.00	0.00
ATOM 1181	HA	VAL A	82	149.764	0.890	-5.687	1.00	0.00
ATOM 1182	HB	VAL A	82	147.648	-0.379	-5.412	1.00	0.00
ATOM 1183	1HG1	VAL A	82	150.134	-1.294	-5.233	1.00	0.00
ATOM 1184	2HG1	VAL A	82	148.732	-2.349	-5.058	1.00	0.00
ATOM 1185	3HG1	VAL A	82	149.574	-1.758	-3.626	1.00	0.00
ATOM 1186	1HG2	VAL A	82	147.581	-1.214	-2.825	1.00	0.00
ATOM 1187	2HG2	VAL A	82	146.551	0.050	-3.498	1.00	0.00
ATOM 1188	3HG2	VAL A	82	148.025	0.482	-2.631	1.00	0.00
ATOM 1189	N	LYS A	83	147.522	2.190	-6.114	1.00	0.00
ATOM 1190	CA	LYS A	83	146.571	3.255	-6.413	1.00	0.00
ATOM 1191	C	LYS A	83	145.380	3.204	-5.464	1.00	0.00
ATOM 1192	O	LYS A	83	144.707	2.180	-5.348	1.00	0.00
ATOM 1193	CB	LYS A	83	146.091	3.145	-7.860	1.00	0.00
ATOM 1194	CG	LYS A	83	147.213	3.230	-8.882	1.00	0.00
ATOM 1195	CD	LYS A	83	146.736	2.827	-10.268	1.00	0.00
ATOM 1196	CE	LYS A	83	147.304	3.741	-11.341	1.00	0.00
ATOM 1197	NZ	LYS A	83	147.522	3.022	-12.627	1.00	0.00
ATOM 1198	H	LYS A	83	147.660	1.475	-6.769	1.00	0.00
ATOM 1199	HA	LYS A	83	147.079	4.199	-6.281	1.00	0.00
ATOM 1200	1HB	LYS A	83	145.586	2.200	-7.989	1.00	0.00
ATOM 1201	2HB	LYS A	83	145.393	3.945	-8.058	1.00	0.00
ATOM 1202	1HG	LYS A	83	147.577	4.246	-8.918	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.012	2.569	-8.579	1.00	0.00
ATOM 1204	1HD	LYS A	83	147.055	1.814	-10.467	1.00	0.00

ATOM 1205	2HD	LYS A	83	145.658	2.878	-10.297	1.00	0.00
ATOM 1206	1HE	LYS A	83	146.613	4.554	-11.507	1.00	0.00
ATOM 1207	2HE	LYS A	83	148.247	4.137	-10.995	1.00	0.00
ATOM 1208	1HZ	LYS A	83	148.420	2.497	-12.595	1.00	0.00
ATOM 1209	2HZ	LYS A	83	147.557	3.699	-13.414	1.00	0.00
ATOM 1210	3HZ	LYS A	83	146.746	2.349	-12.796	1.00	0.00
ATOM 1211	N	LEU A	84	145.125	4.318	-4.788	1.00	0.00
ATOM 1212	CA	LEU A	84	144.015	4.410	-3.849	1.00	0.00
ATOM 1213	C	LEU A	84	142.685	4.149	-4.549	1.00	0.00
ATOM 1214	O	LEU A	84	141.743	3.636	-3.944	1.00	0.00
ATOM 1215	CB	LEU A	84	143.997	5.791	-3.189	1.00	0.00
ATOM 1216	CG	LEU A	84	142.811	6.051	-2.258	1.00	0.00
ATOM 1217	CD1	LEU A	84	142.917	5.194	-1.006	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.737	7.526	-1.891	1.00	0.00
ATOM 1219	H	LEU A	84	145.698	5.101	-4.926	1.00	0.00
ATOM 1220	HA	LEU A	84	144.162	3.659	-3.087	1.00	0.00
ATOM 1221	1HB	LEU A	84	144.908	5.907	-2.620	1.00	0.00
ATOM 1222	2HB	LEU A	84	143.984	6.537	-3.969	1.00	0.00
ATOM 1223	HG	LEU A	84	141.896	5.786	-2.767	1.00	0.00
ATOM 1224	1HD1	LEU A	84	143.435	5.745	-0.236	1.00	0.00
ATOM 1225	2HD1	LEU A	84	143.465	4.291	-1.234	1.00	0.00
ATOM 1226	3HD1	LEU A	84	141.927	4.936	-0.662	1.00	0.00
ATOM 1227	1HD2	LEU A	84	141.795	7.729	-1.404	1.00	0.00
ATOM 1228	2HD2	LEU A	84	142.815	8.124	-2.787	1.00	0.00
ATOM 1229	3HD2	LEU A	84	143.549	7.772	-1.222	1.00	0.00
ATOM 1230	N	LYS A	85	142.616	4.505	-5.827	1.00	0.00
ATOM 1231	CA	LYS A	85	141.401	4.310	-6.611	1.00	0.00
ATOM 1232	C	LYS A	85	141.072	2.826	-6.754	1.00	0.00
ATOM 1233	O	LYS A	85	139.912	2.453	-6.932	1.00	0.00

ATOM 1234	CB	LYS A	85	141.555	4.944	-7.994	1.00	0.00
ATOM 1235	CG	LYS A	85	142.656	4.315	-8.833	1.00	0.00
ATOM 1236	CD	LYS A	85	143.327	5.341	-9.732	1.00	0.00
ATOM 1237	CE	LYS A	85	142.637	5.432	-11.083	1.00	0.00
ATOM 1238	NZ	LYS A	85	141.191	5.755	-10.950	1.00	0.00
ATOM 1239	H	LYS A	85	143.400	4.910	-6.254	1.00	0.00
ATOM 1240	HA	LYS A	85	140.590	4.797	-6.091	1.00	0.00
ATOM 1241	1HB	LYS A	85	140.622	4.844	-8.529	1.00	0.00
ATOM 1242	2HB	LYS A	85	141.779	5.994	-7.874	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.397	3.888	-8.175	1.00	0.00
ATOM 1244	2HG	LYS A	85	142.226	3.537	-9.447	1.00	0.00
ATOM 1245	1HD	LYS A	85	143.284	6.308	-9.252	1.00	0.00
ATOM 1246	2HD	LYS A	85	144.358	5.055	-9.881	1.00	0.00
ATOM 1247	1HE	LYS A	85	143.117	6.205	-11.666	1.00	0.00
ATOM 1248	2HE	LYS A	85	142.741	4.484	-11.590	1.00	0.00
ATOM 1249	1HZ	LYS A	85	140.781	5.957	-11.884	1.00	0.00
ATOM 1250	2HZ	LYS A	85	141.065	6.590	-10.342	1.00	0.00
ATOM 1251	3HZ	LYS A	85	140.683	4.953	-10.526	1.00	0.00
ATOM 1252	N	SER A	86	142.098	1.984	-6.674	1.00	0.00
ATOM 1253	CA	SER A	86	141.913	0.542	-6.794	1.00	0.00
ATOM 1254	C	SER A	86	141.835	-0.115	-5.420	1.00	0.00
ATOM 1255	O	SER A	86	142.239	-1.265	-5.247	1.00	0.00
ATOM 1256	CB	SER A	86	143.057	-0.073	-7.602	1.00	0.00
ATOM 1257	OG	SER A	86	143.348	0.704	-8.751	1.00	0.00
ATOM 1258	H	SER A	86	143.000	2.340	-6.531	1.00	0.00
ATOM 1259	HA	SER A	86	140.984	0.370	-7.316	1.00	0.00
ATOM 1260	1HB	SER A	86	143.942	-0.126	-6.986	1.00	0.00
ATOM 1261	2HB	SER A	86	142.778	-1.068	-7.916	1.00	0.00
ATOM 1262	HG	SER A	86	144.296	0.706	-8.905	1.00	0.00

ATOM 1263	N	CYS A	87	141.311	0.621	-4.445	1.00	0.00
ATOM 1264	CA	CYS A	87	141.180	0.107	-3.086	1.00	0.00
ATOM 1265	C	CYS A	87	139.712	0.006	-2.683	1.00	0.00
ATOM 1266	O	CYS A	87	138.868	0.749	-3.182	1.00	0.00
ATOM 1267	CB	CYS A	87	141.929	1.008	-2.104	1.00	0.00
ATOM 1268	SG	CYS A	87	143.720	1.039	-2.349	1.00	0.00
ATOM 1269	H	CYS A	87	141.005	1.530	-4.642	1.00	0.00
ATOM 1270	HA	CYS A	87	141.616	-0.880	-3.061	1.00	0.00
ATOM 1271	1HB	CYS A	87	141.568	2.020	-2.207	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.741	0.665	-1.096	1.00	0.00
ATOM 1273	HG	CYS A	87	144.138	0.829	-1.511	1.00	0.00
ATOM 1274	N	ARG A	88	139.416	-0.921	-1.777	1.00	0.00
ATOM 1275	CA	ARG A	88	138.050	-1.121	-1.307	1.00	0.00
ATOM 1276	C	ARG A	88	138.005	-1.203	0.219	1.00	0.00
ATOM 1277	O	ARG A	88	138.924	-1.729	0.846	1.00	0.00
ATOM 1278	CB	ARG A	88	137.458	-2.394	-1.918	1.00	0.00
ATOM 1279	CG	ARG A	88	136.431	-2.125	-3.009	1.00	0.00
ATOM 1280	CD	ARG A	88	135.076	-2.726	-2.667	1.00	0.00
ATOM 1281	NE	ARG A	88	134.097	-1.701	-2.312	1.00	0.00
ATOM 1282	CZ	ARG A	88	133.646	-0.781	-3.162	1.00	0.00
ATOM 1283	NH1	ARG A	88	134.084	-0.752	-4.414	1.00	0.00
ATOM 1284	NH2	ARG A	88	132.754	0.114	-2.758	1.00	0.00
ATOM 1285	H	ARG A	88	140.132	-1.484	-1.416	1.00	0.00
ATOM 1286	HA	ARG A	88	137.463	-0.273	-1.627	1.00	0.00
ATOM 1287	1HB	ARG A	88	138.260	-2.978	-2.346	1.00	0.00
ATOM 1288	2HB	ARG A	88	136.983	-2.969	-1.138	1.00	0.00
ATOM 1289	1HG	ARG A	88	136.320	-1.057	-3.128	1.00	0.00
ATOM 1290	2HG	ARG A	88	136.784	-2.557	-3.934	1.00	0.00
ATOM 1291	1HD	ARG A	88	134.714	-3.274	-3.524	1.00	0.00

ATOM 1292	2HD	ARG A	88	135.195	-3.401	-1.832	1.00	0.00
ATOM 1293	HE	ARG A	88	133.756	-1.699	-1.393	1.00	0.00
ATOM 1294	1HH1	ARG A	88	134.757	-1.424	-4.726	1.00	0.00
ATOM 1295	2HH1	ARG A	88	133.742	-0.058	-5.047	1.00	0.00
ATOM 1296	1HH2	ARG A	88	132.420	0.097	-1.815	1.00	0.00
ATOM 1297	2HH2	ARG A	88	132.416	0.806	-3.395	1.00	0.00
ATOM 1298	N	PRO A	89	136.930	-0.683	0.838	1.00	0.00
ATOM 1299	CA	PRO A	89	136.774	-0.703	2.296	1.00	0.00
ATOM 1300	C	PRO A	89	136.931	-2.105	2.875	1.00	0.00
ATOM 1301	O	PRO A	89	136.144	-3.003	2.574	1.00	0.00
ATOM 1302	CB	PRO A	89	135.347	-0.195	2.512	1.00	0.00
ATOM 1303	CG	PRO A	89	135.044	0.615	1.300	1.00	0.00
ATOM 1304	CD	PRO A	89	135.786	-0.038	0.168	1.00	0.00
ATOM 1305	HA	PRO A	89	137.475	-0.037	2.777	1.00	0.00
ATOM 1306	1HB	PRO A	89	134.675	-1.035	2.605	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.308	0.406	3.408	1.00	0.00
ATOM 1308	1HG	PRO A	89	133.981	0.605	1.108	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.391	1.628	1.439	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.160	-0.772	-0.319	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.122	0.703	-0.541	1.00	0.00
ATOM 1312	N	ASP A	90	137.951	-2.286	3.707	1.00	0.00
ATOM 1313	CA	ASP A	90	138.210	-3.579	4.329	1.00	0.00
ATOM 1314	C	ASP A	90	137.750	-3.586	5.783	1.00	0.00
ATOM 1315	O	ASP A	90	138.340	-2.918	6.633	1.00	0.00
ATOM 1316	CB	ASP A	90	139.699	-3.915	4.251	1.00	0.00
ATOM 1317	CG	ASP A	90	139.952	-5.409	4.179	1.00	0.00
ATOM 1318	OD1	ASP A	90	140.458	-5.974	5.171	1.00	0.00
ATOM 1319	OD2	ASP A	90	139.643	-6.013	3.131	1.00	0.00
ATOM 1320	H	ASP A	90	138.543	-1.532	3.909	1.00	0.00



ATOM 1321	HA	ASP A	90	137.652	-4.326	3.784	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.121	-3.455	3.370	1.00	0.00
ATOM 1323	2HB	ASP A	90	140.195	-3.527	5.128	1.00	0.00
ATOM 1324	N	SER A	91	136.697	-4.345	6.063	1.00	0.00
ATOM 1325	CA	SER A	91	136.163	-4.439	7.417	1.00	0.00
ATOM 1326	C	SER A	91	136.405	-5.826	8.004	1.00	0.00
ATOM 1327	O	SER A	91	135.654	-6.286	8.864	1.00	0.00
ATOM 1328	CB	SER A	91	134.664	-4.130	7.419	1.00	0.00
ATOM 1329	OG	SER A	91	134.264	-3.549	8.648	1.00	0.00
ATOM 1330	H	SER A	91	136.270	-4.856	5.344	1.00	0.00
ATOM 1331	HA	SER A	91	136.672	-3.708	8.027	1.00	0.00
ATOM 1332	1HB	SER A	91	134.440	-3.440	6.619	1.00	0.00
ATOM 1333	2HB	SER A	91	134.111	-5.046	7.272	1.00	0.00
ATOM 1334	HG	SER A	91	134.508	-2.620	8.658	1.00	0.00
ATOM 1335	N	ARG A	92	137.459	-6.487	7.536	1.00	0.00
ATOM 1336	CA	ARG A	92	137.799	-7.821	8.017	1.00	0.00
ATOM 1337	C	ARG A	92	138.193	-7.782	9.490	1.00	0.00
ATOM 1338	O	ARG A	92	137.991	-8.751	10.223	1.00	0.00
ATOM 1339	CB	ARG A	92	138.940	-8.410	7.187	1.00	0.00
ATOM 1340	CG	ARG A	92	138.468	-9.193	5.972	1.00	0.00
ATOM 1341	CD	ARG A	92	138.300	-8.294	4.757	1.00	0.00
ATOM 1342	NE	ARG A	92	136.945	-8.354	4.214	1.00	0.00
ATOM 1343	CZ	ARG A	92	136.620	-7.964	2.984	1.00	0.00
ATOM 1344	NH1	ARG A	92	137.549	-7.484	2.165	1.00	0.00
ATOM 1345	NH2	ARG A	92	135.364	-8.053	2.569	1.00	0.00
ATOM 1346	H	ARG A	92	138.021	-6.068	6.851	1.00	0.00
ATOM 1347	HA	ARG A	92	136.925	-8.445	7.907	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.575	-7.605	6.845	1.00	0.00
ATOM 1349	2HB	ARG A	92	139.520	-9.073	7.812	1.00	0.00

ATOM 1350	1HG	ARG A	92	139.195	-9.958	5.744	1.00	0.00
ATOM 1351	2HG	ARG A	92	137.518	-9.654	6.201	1.00	0.00
ATOM 1352	1HD	ARG A	92	138.517	-7.276	5.043	1.00	0.00
ATOM 1353	2HD	ARG A	92	138.997	-8.609	3.994	1.00	0.00
ATOM 1354	HE	ARG A	92	136.240	-8.704	4.798	1.00	0.00
ATOM 1355	1HH1	ARG A	92	138.499	-7.414	2.472	1.00	0.00
ATOM 1356	2HH1	ARG A	92	137.299	-7.193	1.242	1.00	0.00
ATOM 1357	1HH2	ARG A	92	134.660	-8.414	3.182	1.00	0.00
ATOM 1358	2HH2	ARG A	92	135.120	-7.759	1.646	1.00	0.00
ATOM 1359	N	PHE A	93	138.757	-6.657	9.917	1.00	0.00
ATOM 1360	CA	PHE A	93	139.180	-6.492	11.304	1.00	0.00
ATOM 1361	C	PHE A	93	138.401	-5.369	11.982	1.00	0.00
ATOM 1362	O	PHE A	93	138.910	-4.705	12.885	1.00	0.00
ATOM 1363	CB	PHE A	93	140.679	-6.198	11.369	1.00	0.00
ATOM 1364	CG	PHE A	93	141.523	-7.226	10.669	1.00	0.00
ATOM 1365	CD1	PHE A	93	142.351	-8.069	11.393	1.00	0.00
ATOM 1366	CD2	PHE A	93	141.487	-7.347	9.290	1.00	0.00
ATOM 1367	CE1	PHE A	93	143.128	-9.015	10.752	1.00	0.00
ATOM 1368	CE2	PHE A	93	142.262	-8.291	8.643	1.00	0.00
ATOM 1369	CZ	PHE A	93	143.084	-9.127	9.375	1.00	0.00
ATOM 1370	H	PHE A	93	138.892	-5.919	9.286	1.00	0.00
ATOM 1371	HA	PHE A	93	138.980	-7.417	11.823	1.00	0.00
ATOM 1372	1HB	PHE A	93	140.872	-5.241	10.908	1.00	0.00
ATOM 1373	2HB	PHE A	93	140.986	-6.162	12.404	1.00	0.00
ATOM 1374	HD1	PHE A	93	142.386	-7.983	12.469	1.00	0.00
ATOM 1375	HD2	PHE A	93	140.845	-6.695	8.717	1.00	0.00
ATOM 1376	HE1	PHE A	93	143.770	-9.667	11.326	1.00	0.00
ATOM 1377	HE2	PHE A	93	142.225	-8.376	7.567	1.00	0.00
ATOM 1378	HZ	PHE A	93	143.690	-9.865	8.873	1.00	0.00

ATOM 1379	N	ALA A	94	137.162	-5.162	11.543	1.00	0.00
ATOM 1380	CA	ALA A	94	136.315	-4.119	12.109	1.00	0.00
ATOM 1381	C	ALA A	94	136.137	-4.315	13.612	1.00	0.00
ATOM 1382	O	ALA A	94	135.661	-5.358	14.061	1.00	0.00
ATOM 1383	CB	ALA A	94	134.964	-4.101	11.410	1.00	0.00
ATOM 1384	H	ALA A	94	136.811	-5.723	10.819	1.00	0.00
ATOM 1385	HA	ALA A	94	136.796	-3.168	11.936	1.00	0.00
ATOM 1386	1HB	ALA A	94	134.900	-3.232	10.773	1.00	0.00
ATOM 1387	2HB	ALA A	94	134.175	-4.065	12.147	1.00	0.00
ATOM 1388	3HB	ALA A	94	134.856	-4.994	10.812	1.00	0.00
ATOM 1389	N	SER A	95	136.521	-3.304	14.385	1.00	0.00
ATOM 1390	CA	SER A	95	136.403	-3.364	15.837	1.00	0.00
ATOM 1391	C	SER A	95	134.940	-3.417	16.263	1.00	0.00
ATOM 1392	O	SER A	95	134.056	-2.942	15.549	1.00	0.00
ATOM 1393	CB	SER A	95	137.088	-2.155	16.476	1.00	0.00
ATOM 1394	OG	SER A	95	138.479	-2.154	16.204	1.00	0.00
ATOM 1395	H	SER A	95	136.892	-2.498	13.968	1.00	0.00
ATOM 1396	HA	SER A	95	136.895	-4.265	16.172	1.00	0.00
ATOM 1397	1HB	SER A	95	136.657	-1.249	16.081	1.00	0.00
ATOM 1398	2HB	SER A	95	136.943	-2.187	17.546	1.00	0.00
ATOM 1399	HG	SER A	95	138.947	-2.573	16.930	1.00	0.00
ATOM 1400	N	LEU A	96	134.689	-3.999	17.432	1.00	0.00
ATOM 1401	CA	LEU A	96	133.333	-4.114	17.954	1.00	0.00
ATOM 1402	C	LEU A	96	132.453	-4.926	17.010	1.00	0.00
ATOM 1403	O	LEU A	96	131.929	-4.402	16.027	1.00	0.00
ATOM 1404	CB	LEU A	96	132.727	-2.726	18.167	1.00	0.00
ATOM 1405	CG	LEU A	96	131.527	-2.680	19.115	1.00	0.00
ATOM 1406	CD1	LEU A	96	131.490	-1.359	19.866	1.00	0.00
ATOM 1407	CD2	LEU A	96	130.232	-2.895	18.344	1.00	0.00

ATOM 1408	H	LEU A	96	135.436	-4.359	17.956	1.00	0.00
ATOM 1409	HA	LEU A	96	133.386	-4.624	18.904	1.00	0.00
ATOM 1410	1HB	LEU A	96	133.496	-2.077	18.561	1.00	0.00
ATOM 1411	2HB	LEU A	96	132.413	-2.342	17.208	1.00	0.00
ATOM 1412	HG	LEU A	96	131.621	-3.475	19.840	1.00	0.00
ATOM 1413	1HD1	LEU A	96	131.103	-0.587	19.218	1.00	0.00
ATOM 1414	2HD1	LEU A	96	132.487	-1.097	20.183	1.00	0.00
ATOM 1415	3HD1	LEU A	96	130.851	-1.456	20.732	1.00	0.00
ATOM 1416	1HD2	LEU A	96	130.444	-3.422	17.426	1.00	0.00
ATOM 1417	2HD2	LEU A	96	129.787	-1.938	18.116	1.00	0.00
ATOM 1418	3HD2	LEU A	96	129.548	-3.477	18.945	1.00	0.00
ATOM 1419	N	GLN A	97	132.295	-6.211	17.314	1.00	0.00
ATOM 1420	CA	GLN A	97	131.478	-7.096	16.492	1.00	0.00
ATOM 1421	C	GLN A	97	130.853	-8.204	17.339	1.00	0.00
ATOM 1422	O	GLN A	97	131.005	-9.388	17.040	1.00	0.00
ATOM 1423	CB	GLN A	97	132.321	-7.708	15.371	1.00	0.00
ATOM 1424	CG	GLN A	97	131.511	-8.109	14.149	1.00	0.00
ATOM 1425	CD	GLN A	97	132.049	-9.356	13.476	1.00	0.00
ATOM 1426	OE1	GLN A	97	132.386	-10.337	14.138	1.00	0.00
ATOM 1427	NE2	GLN A	97	132.134	-9.323	12.151	1.00	0.00
ATOM 1428	H	GLN A	97	132.738	-6.571	18.110	1.00	0.00
ATOM 1429	HA	GLN A	97	130.687	-6.506	16.055	1.00	0.00
ATOM 1430	1HB	GLN A	97	133.065	-6.987	15.061	1.00	0.00
ATOM 1431	2HB	GLN A	97	132.821	-8.588	15.750	1.00	0.00
ATOM 1432	1HG	GLN A	97	130.492	-8.296	14.455	1.00	0.00
ATOM 1433	2HG	GLN A	97	131.530	-7.296	13.438	1.00	0.00
ATOM 1434	1HE2	GLN A	97	131.847	-8.508	11.689	1.00	0.00
ATOM 1435	2HE2	GLN A	97	132.478	-10.116	11.690	1.00	0.00
ATOM 1436	N	PRO A	98	130.137	-7.830	18.413	1.00	0.00

ATOM 1437	CA	PRO A	98	129.487	-8.797	19.305	1.00	0.00
ATOM 1438	C	PRO A	98	128.279	-9.461	18.655	1.00	0.00
ATOM 1439	O	PRO A	98	128.061	-9.336	17.449	1.00	0.00
ATOM 1440	CB	PRO A	98	129.050	-7.941	20.495	1.00	0.00
ATOM 1441	CG	PRO A	98	128.876	-6.573	19.933	1.00	0.00
ATOM 1442	CD	PRO A	98	129.904	-6.437	18.843	1.00	0.00
ATOM 1443	HA	PRO A	98	130.179	-9.556	19.637	1.00	0.00
ATOM 1444	1HB	PRO A	98	128.126	-8.326	20.898	1.00	0.00
ATOM 1445	2HB	PRO A	98	129.817	-7.960	21.256	1.00	0.00
ATOM 1446	1HG	PRO A	98	127.881	-6.469	19.526	1.00	0.00
ATOM 1447	2HG	PRO A	98	129.046	-5.836	20.703	1.00	0.00
ATOM 1448	1HD	PRO A	98	129.515	-5.843	18.029	1.00	0.00
ATOM 1449	2HD	PRO A	98	130.810	-5.998	19.233	1.00	0.00
ATOM 1450	N	SER A	99	127.494	-10.169	19.462	1.00	0.00
ATOM 1451	CA	SER A	99	126.306	-10.854	18.966	1.00	0.00
ATOM 1452	C	SER A	99	125.385	-11.247	20.115	1.00	0.00
ATOM 1453	O	SER A	99	125.840	-11.743	21.146	1.00	0.00
ATOM 1454	CB	SER A	99	126.704	-12.096	18.168	1.00	0.00
ATOM 1455	OG	SER A	99	127.637	-11.774	17.150	1.00	0.00
ATOM 1456	H	SER A	99	127.719	-10.231	20.413	1.00	0.00
ATOM 1457	HA	SER A	99	125.778	-10.172	18.315	1.00	0.00
ATOM 1458	1HB	SER A	99	127.153	-12.820	18.832	1.00	0.00
ATOM 1459	2HB	SER A	99	125.824	-12.526	17.710	1.00	0.00
ATOM 1460	HG	SER A	99	128.438	-12.286	17.275	1.00	0.00
ATOM 1461	N	GLY A	100	124.088	-11.024	19.932	1.00	0.00
ATOM 1462	CA	GLY A	100	123.124	-11.361	20.963	1.00	0.00
ATOM 1463	C	GLY A	100	121.706	-11.447	20.429	1.00	0.00
ATOM 1464	O	GLY A	100	120.983	-10.451	20.420	1.00	0.00
ATOM 1465	H	GLY A	100	123.782	-10.626	19.090	1.00	0.00

ATOM 1466	1HA	GLY A 100	123.394	-12.314	21.393	1.00	0.00
ATOM 1467	2HA	GLY A 100	123.161	-10.607	21.736	1.00	0.00
ATOM 1468	N	PRO A 101	121.277	-12.635	19.970	1.00	0.00
ATOM 1469	CA	PRO A 101	119.927	-12.833	19.431	1.00	0.00
ATOM 1470	C	PRO A 101	118.856	-12.759	20.514	1.00	0.00
ATOM 1471	O	PRO A 101	117.797	-12.164	20.313	1.00	0.00
ATOM 1472	CB	PRO A 101	119.986	-14.239	18.833	1.00	0.00
ATOM 1473	CG	PRO A 101	121.058	-14.933	19.599	1.00	0.00
ATOM 1474	CD	PRO A 101	122.072	-13.877	19.941	1.00	0.00
ATOM 1475	HA	PRO A 101	119.703	-12.117	18.655	1.00	0.00
ATOM 1476	1HB	PRO A 101	119.030	-14.727	18.958	1.00	0.00
ATOM 1477	2HB	PRO A 101	120.230	-14.177	17.782	1.00	0.00
ATOM 1478	1HG	PRO A 101	120.646	-15.363	20.501	1.00	0.00
ATOM 1479	2HG	PRO A 101	121.508	-15.702	18.989	1.00	0.00
ATOM 1480	1HD	PRO A 101	122.513	-14.076	20.907	1.00	0.00
ATOM 1481	2HD	PRO A 101	122.836	-13.827	19.179	1.00	0.00
ATOM 1482	N	SER A 102	119.138	-13.367	21.661	1.00	0.00
ATOM 1483	CA	SER A 102	118.198	-13.369	22.776	1.00	0.00
ATOM 1484	C	SER A 102	116.891	-14.051	22.386	1.00	0.00
ATOM 1485	O	SER A 102	116.548	-14.126	21.206	1.00	0.00
ATOM 1486	CB	SER A 102	117.922	-11.938	23.242	1.00	0.00
ATOM 1487	OG	SER A 102	118.809	-11.557	24.277	1.00	0.00
ATOM 1488	H	SER A 102	119.999	-13.824	21.760	1.00	0.00
ATOM 1489	HA	SER A 102	118.650	-13.921	23.588	1.00	0.00
ATOM 1490	1HB	SER A 102	118.047	-11.261	22.410	1.00	0.00
ATOM 1491	2HB	SER A 102	116.908	-11.872	23.609	1.00	0.00
ATOM 1492	HG	SER A 102	119.210	-10.712	24.061	1.00	0.00
ATOM 1493	N	SER A 103	116.168	-14.548	23.383	1.00	0.00
ATOM 1494	CA	SER A 103	114.898	-15.225	23.144	1.00	0.00

ATOM 1495 C SER A 103 113.728 -14.368 23.617 1.00 0.00  
ATOM 1496 O SER A 103 113.660 -13.981 24.784 1.00 0.00  
ATOM 1497 CB SER A 103 114.875 -16.578 23.856 1.00 0.00  
ATOM 1498 OG SER A 103 115.624 -16.535 25.059 1.00 0.00  
ATOM 1499 H SER A 103 116.495 -14.458 24.303 1.00 0.00  
ATOM 1500 HA SER A 103 114.804 -15.386 22.081 1.00 0.00  
ATOM 1501 1HB SER A 103 113.855 -16.840 24.093 1.00 0.00  
ATOM 1502 2HB SER A 103 115.299 -17.330 23.208 1.00 0.00  
ATOM 1503 HG SER A 103 116.371 -17.133 24.992 1.00 0.00  
ATOM 1504 N GLY A 104 112.809 -14.076 22.702 1.00 0.00  
ATOM 1505 CA GLY A 104 111.653 -13.267 23.046 1.00 0.00  
ATOM 1506 C GLY A 104 112.037 -11.875 23.512 1.00 0.00  
ATOM 1507 O GLY A 104 111.578 -11.468 24.600 1.00 0.00  
ATOM 1508 OXT GLY A 104 112.796 -11.196 22.791 1.00 0.00  
ATOM 1509 H GLY A 104 112.915 -14.411 21.788 1.00 0.00  
ATOM 1510 1HA GLY A 104 111.018 -13.179 22.176 1.00 0.00  
ATOM 1511 2HA GLY A 104 111.103 -13.760 23.833 1.00 0.00  
TER 1512 GLY A 104  
ENDMDL

## 【 0 1 0 2 】

## 立体構造座標表 5

ATOM 1 N GLY A 1 119.934 2.440 -12.362 1.00 0.00  
ATOM 2 CA GLY A 1 120.718 2.882 -11.176 1.00 0.00  
ATOM 3 C GLY A 1 121.589 4.087 -11.473 1.00 0.00  
ATOM 4 O GLY A 1 122.802 4.050 -11.266 1.00 0.00  
ATOM 5 1H GLY A 1 120.404 1.634 -12.822 1.00 0.00  
ATOM 6 2H GLY A 1 119.854 3.217 -13.049 1.00 0.00  
ATOM 7 3H GLY A 1 118.978 2.151 -12.071 1.00 0.00

ATOM 8	1HA	GLY A	1	120.034	3.135	-10.380	1.00	0.00
ATOM 9	2HA	GLY A	1	121.348	2.067	-10.851	1.00	0.00
ATOM 10	N	SER A	2	120.970	5.157	-11.960	1.00	0.00
ATOM 11	CA	SER A	2	121.698	6.378	-12.287	1.00	0.00
ATOM 12	C	SER A	2	122.748	6.115	-13.362	1.00	0.00
ATOM 13	O	SER A	2	123.937	6.005	-13.067	1.00	0.00
ATOM 14	CB	SER A	2	122.364	6.950	-11.035	1.00	0.00
ATOM 15	OG	SER A	2	121.480	7.806	-10.331	1.00	0.00
ATOM 16	H	SER A	2	120.001	5.125	-12.104	1.00	0.00
ATOM 17	HA	SER A	2	120.985	7.096	-12.665	1.00	0.00
ATOM 18	1HB	SER A	2	122.654	6.140	-10.382	1.00	0.00
ATOM 19	2HB	SER A	2	123.239	7.514	-11.321	1.00	0.00
ATOM 20	HG	SER A	2	121.576	7.661	-9.387	1.00	0.00
ATOM 21	N	SER A	3	122.299	6.016	-14.609	1.00	0.00
ATOM 22	CA	SER A	3	123.200	5.765	-15.728	1.00	0.00
ATOM 23	C	SER A	3	123.931	4.438	-15.551	1.00	0.00
ATOM 24	O	SER A	3	123.690	3.708	-14.590	1.00	0.00
ATOM 25	CB	SER A	3	124.211	6.905	-15.859	1.00	0.00
ATOM 26	OG	SER A	3	123.566	8.124	-16.188	1.00	0.00
ATOM 27	H	SER A	3	121.339	6.112	-14.781	1.00	0.00
ATOM 28	HA	SER A	3	122.605	5.717	-16.628	1.00	0.00
ATOM 29	1HB	SER A	3	124.734	7.030	-14.923	1.00	0.00
ATOM 30	2HB	SER A	3	124.919	6.666	-16.639	1.00	0.00
ATOM 31	HG	SER A	3	122.788	8.233	-15.637	1.00	0.00
ATOM 32	N	GLY A	4	124.827	4.134	-16.485	1.00	0.00
ATOM 33	CA	GLY A	4	125.580	2.896	-16.413	1.00	0.00
ATOM 34	C	GLY A	4	126.815	3.017	-15.541	1.00	0.00
ATOM 35	O	GLY A	4	127.021	4.037	-14.883	1.00	0.00
ATOM 36	H	GLY A	4	124.978	4.755	-17.227	1.00	0.00



ATOM 37	1HA	GLY A	4	124.942	2.122	-16.011	1.00	0.00
ATOM 38	2HA	GLY A	4	125.883	2.614	-17.411	1.00	0.00
ATOM 39	N	SER A	5	127.638	1.973	-15.537	1.00	0.00
ATOM 40	CA	SER A	5	128.859	1.967	-14.740	1.00	0.00
ATOM 41	C	SER A	5	128.541	2.115	-13.255	1.00	0.00
ATOM 42	O	SER A	5	127.375	2.182	-12.864	1.00	0.00
ATOM 43	CB	SER A	5	129.792	3.093	-15.188	1.00	0.00
ATOM 44	OG	SER A	5	130.310	2.842	-16.482	1.00	0.00
ATOM 45	H	SER A	5	127.419	1.190	-16.083	1.00	0.00
ATOM 46	HA	SER A	5	129.352	1.019	-14.897	1.00	0.00
ATOM 47	1HB	SER A	5	129.245	4.025	-15.208	1.00	0.00
ATOM 48	2HB	SER A	5	130.615	3.174	-14.493	1.00	0.00
ATOM 49	HG	SER A	5	130.634	1.939	-16.528	1.00	0.00
ATOM 50	N	SER A	6	129.584	2.166	-12.434	1.00	0.00
ATOM 51	CA	SER A	6	129.415	2.307	-10.992	1.00	0.00
ATOM 52	C	SER A	6	128.918	3.704	-10.637	1.00	0.00
ATOM 53	O	SER A	6	128.643	4.519	-11.517	1.00	0.00
ATOM 54	CB	SER A	6	130.735	2.024	-10.273	1.00	0.00
ATOM 55	OG	SER A	6	130.834	0.658	-9.907	1.00	0.00
ATOM 56	H	SER A	6	130.488	2.108	-12.805	1.00	0.00
ATOM 57	HA	SER A	6	128.680	1.584	-10.673	1.00	0.00
ATOM 58	1HB	SER A	6	131.558	2.268	-10.928	1.00	0.00
ATOM 59	2HB	SER A	6	130.794	2.629	-9.380	1.00	0.00
ATOM 60	HG	SER A	6	131.760	0.409	-9.847	1.00	0.00
ATOM 61	N	GLY A	7	128.805	3.974	-9.340	1.00	0.00
ATOM 62	CA	GLY A	7	128.341	5.274	-8.891	1.00	0.00
ATOM 63	C	GLY A	7	129.005	5.713	-7.601	1.00	0.00
ATOM 64	O	GLY A	7	129.918	5.051	-7.108	1.00	0.00
ATOM 65	H	GLY A	7	129.039	3.285	-8.683	1.00	0.00

ATOM 66	1HA	GLY A	7	128.552	6.003	-9.658	1.00	0.00
ATOM 67	2HA	GLY A	7	127.273	5.228	-8.736	1.00	0.00
ATOM 68	N	LEU A	8	128.544	6.833	-7.053	1.00	0.00
ATOM 69	CA	LEU A	8	129.099	7.360	-5.811	1.00	0.00
ATOM 70	C	LEU A	8	127.992	7.667	-4.808	1.00	0.00
ATOM 71	O	LEU A	8	126.829	7.822	-5.180	1.00	0.00
ATOM 72	CB	LEU A	8	129.916	8.624	-6.089	1.00	0.00
ATOM 73	CG	LEU A	8	131.353	8.378	-6.550	1.00	0.00
ATOM 74	CD1	LEU A	8	131.955	9.650	-7.124	1.00	0.00
ATOM 75	CD2	LEU A	8	132.199	7.859	-5.397	1.00	0.00
ATOM 76	H	LEU A	8	127.814	7.315	-7.493	1.00	0.00
ATOM 77	HA	LEU A	8	129.750	6.607	-5.392	1.00	0.00
ATOM 78	1HB	LEU A	8	129.407	9.194	-6.854	1.00	0.00
ATOM 79	2HB	LEU A	8	129.947	9.213	-5.186	1.00	0.00
ATOM 80	HG	LEU A	8	131.352	7.628	-7.328	1.00	0.00
ATOM 81	1HD1	LEU A	8	131.820	10.461	-6.423	1.00	0.00
ATOM 82	2HD1	LEU A	8	131.462	9.894	-8.054	1.00	0.00
ATOM 83	3HD1	LEU A	8	133.010	9.501	-7.304	1.00	0.00
ATOM 84	1HD2	LEU A	8	132.928	7.157	-5.772	1.00	0.00
ATOM 85	2HD2	LEU A	8	131.562	7.367	-4.676	1.00	0.00
ATOM 86	3HD2	LEU A	8	132.706	8.686	-4.922	1.00	0.00
ATOM 87	N	ALA A	9	128.361	7.754	-3.534	1.00	0.00
ATOM 88	CA	ALA A	9	127.398	8.042	-2.478	1.00	0.00
ATOM 89	C	ALA A	9	128.053	8.796	-1.326	1.00	0.00
ATOM 90	O	ALA A	9	127.633	8.677	-0.176	1.00	0.00
ATOM 91	CB	ALA A	9	126.766	6.754	-1.975	1.00	0.00
ATOM 92	H	ALA A	9	129.303	7.619	-3.299	1.00	0.00
ATOM 93	HA	ALA A	9	126.617	8.658	-2.899	1.00	0.00
ATOM 94	1HB	ALA A	9	127.284	6.421	-1.087	1.00	0.00

ATOM 95	2HB	ALA A	9	126.839	5.994	-2.740	1.00	0.00
ATOM 96	3HB	ALA A	9	125.726	6.929	-1.742	1.00	0.00
ATOM 97	N	MET A	10	129.085	9.573	-1.643	1.00	0.00
ATOM 98	CA	MET A	10	129.796	10.347	-0.633	1.00	0.00
ATOM 99	C	MET A	10	130.666	11.422	-1.282	1.00	0.00
ATOM 100	O	MET A	10	131.871	11.241	-1.449	1.00	0.00
ATOM 101	CB	MET A	10	130.664	9.427	0.230	1.00	0.00
ATOM 102	CG	MET A	10	130.012	9.038	1.548	1.00	0.00
ATOM 103	SD	MET A	10	130.760	9.864	2.965	1.00	0.00
ATOM 104	CE	MET A	10	132.424	9.208	2.903	1.00	0.00
ATOM 105	H	MET A	10	129.373	9.628	-2.578	1.00	0.00
ATOM 106	HA	MET A	10	129.061	10.827	-0.005	1.00	0.00
ATOM 107	1HB	MET A	10	130.870	8.525	-0.325	1.00	0.00
ATOM 108	2HB	MET A	10	131.596	9.928	0.446	1.00	0.00
ATOM 109	1HG	MET A	10	128.966	9.301	1.508	1.00	0.00
ATOM 110	2HG	MET A	10	130.109	7.970	1.680	1.00	0.00
ATOM 111	1HE	MET A	10	132.732	9.103	1.872	1.00	0.00
ATOM 112	2HE	MET A	10	132.449	8.242	3.384	1.00	0.00
ATOM 113	3HE	MET A	10	133.098	9.881	3.412	1.00	0.00
ATOM 114	N	PRO A	11	130.060	12.563	-1.655	1.00	0.00
ATOM 115	CA	PRO A	11	130.787	13.668	-2.285	1.00	0.00
ATOM 116	C	PRO A	11	131.997	14.110	-1.464	1.00	0.00
ATOM 117	O	PRO A	11	133.081	14.317	-2.011	1.00	0.00
ATOM 118	CB	PRO A	11	129.751	14.793	-2.359	1.00	0.00
ATOM 119	CG	PRO A	11	128.428	14.110	-2.301	1.00	0.00
ATOM 120	CD	PRO A	11	128.627	12.861	-1.489	1.00	0.00
ATOM 121	HA	PRO A	11	131.110	13.409	-3.282	1.00	0.00
ATOM 122	1HB	PRO A	11	129.886	15.465	-1.524	1.00	0.00
ATOM 123	2HB	PRO A	11	129.873	15.335	-3.285	1.00	0.00

ATOM 124	1HG	PRO A	11	127.708	14.752	-1.821	1.00	0.00
ATOM 125	2HG	PRO A	11	128.101	13.859	-3.300	1.00	0.00
ATOM 126	1HD	PRO A	11	128.392	13.045	-0.451	1.00	0.00
ATOM 127	2HD	PRO A	11	128.020	12.057	-1.877	1.00	0.00
ATOM 128	N	PRO A	12	131.836	14.258	-0.134	1.00	0.00
ATOM 129	CA	PRO A	12	132.932	14.672	0.747	1.00	0.00
ATOM 130	C	PRO A	12	134.071	13.659	0.754	1.00	0.00
ATOM 131	O	PRO A	12	135.204	13.984	1.107	1.00	0.00
ATOM 132	CB	PRO A	12	132.283	14.754	2.136	1.00	0.00
ATOM 133	CG	PRO A	12	130.815	14.809	1.879	1.00	0.00
ATOM 134	CD	PRO A	12	130.591	14.030	0.616	1.00	0.00
ATOM 135	HA	PRO A	12	133.318	15.642	0.469	1.00	0.00
ATOM 136	1HB	PRO A	12	132.549	13.879	2.711	1.00	0.00
ATOM 137	2HB	PRO A	12	132.626	15.641	2.644	1.00	0.00
ATOM 138	1HG	PRO A	12	130.281	14.354	2.700	1.00	0.00
ATOM 139	2HG	PRO A	12	130.502	15.834	1.748	1.00	0.00
ATOM 140	1HD	PRO A	12	130.458	12.981	0.837	1.00	0.00
ATOM 141	2HD	PRO A	12	129.738	14.416	0.081	1.00	0.00
ATOM 142	N	GLY A	13	133.759	12.427	0.361	1.00	0.00
ATOM 143	CA	GLY A	13	134.766	11.384	0.327	1.00	0.00
ATOM 144	C	GLY A	13	135.229	11.068	-1.082	1.00	0.00
ATOM 145	O	GLY A	13	134.684	11.593	-2.053	1.00	0.00
ATOM 146	H	GLY A	13	132.837	12.226	0.090	1.00	0.00
ATOM 147	1HA	GLY A	13	135.617	11.700	0.911	1.00	0.00
ATOM 148	2HA	GLY A	13	134.355	10.487	0.768	1.00	0.00
ATOM 149	N	ASN A	14	136.236	10.209	-1.194	1.00	0.00
ATOM 150	CA	ASN A	14	136.770	9.824	-2.495	1.00	0.00
ATOM 151	C	ASN A	14	135.847	8.829	-3.190	1.00	0.00
ATOM 152	O	ASN A	14	135.407	9.058	-4.316	1.00	0.00

ATOM 153	CB	ASN A	14	138.167	9.219	-2.337	1.00	0.00
ATOM 154	CG	ASN A	14	139.066	10.061	-1.454	1.00	0.00
ATOM 155	OD1	ASN A	14	139.732	10.984	-1.925	1.00	0.00
ATOM 156	ND2	ASN A	14	139.090	9.749	-0.164	1.00	0.00
ATOM 157	H	ASN A	14	136.629	9.823	-0.383	1.00	0.00
ATOM 158	HA	ASN A	14	136.841	10.715	-3.100	1.00	0.00
ATOM 159	1HB	ASN A	14	138.079	8.237	-1.896	1.00	0.00
ATOM 160	2HB	ASN A	14	138.627	9.133	-3.310	1.00	0.00
ATOM 161	1HD2	ASN A	14	138.535	9.002	0.142	1.00	0.00
ATOM 162	2HD2	ASN A	14	139.663	10.277	0.430	1.00	0.00
ATOM 163	N	SER A	15	135.560	7.722	-2.512	1.00	0.00
ATOM 164	CA	SER A	15	134.689	6.693	-3.065	1.00	0.00
ATOM 165	C	SER A	15	133.686	6.210	-2.022	1.00	0.00
ATOM 166	O	SER A	15	132.492	6.099	-2.300	1.00	0.00
ATOM 167	CB	SER A	15	135.520	5.512	-3.574	1.00	0.00
ATOM 168	OG	SER A	15	134.733	4.638	-4.365	1.00	0.00
ATOM 169	H	SER A	15	135.942	7.596	-1.618	1.00	0.00
ATOM 170	HA	SER A	15	134.149	7.125	-3.893	1.00	0.00
ATOM 171	1HB	SER A	15	136.337	5.884	-4.175	1.00	0.00
ATOM 172	2HB	SER A	15	135.913	4.962	-2.732	1.00	0.00
ATOM 173	HG	SER A	15	133.932	4.410	-3.889	1.00	0.00
ATOM 174	N	HIS A	16	134.179	5.924	-0.822	1.00	0.00
ATOM 175	CA	HIS A	16	133.325	5.452	0.263	1.00	0.00
ATOM 176	C	HIS A	16	133.925	5.807	1.620	1.00	0.00
ATOM 177	O	HIS A	16	133.233	6.314	2.502	1.00	0.00
ATOM 178	CB	HIS A	16	133.124	3.940	0.160	1.00	0.00
ATOM 179	CG	HIS A	16	131.734	3.497	0.497	1.00	0.00
ATOM 180	ND1	HIS A	16	131.293	3.324	1.793	1.00	0.00
ATOM 181	CD2	HIS A	16	130.683	3.192	-0.300	1.00	0.00

ATOM 182	CE1	HIS A	16	130.032	2.931	1.777	1.00	0.00
ATOM 183	NE2	HIS A	16	129.638	2.843	0.520	1.00	0.00
ATOM 184	H	HIS A	16	135.140	6.032	-0.662	1.00	0.00
ATOM 185	HA	HIS A	16	132.367	5.942	0.166	1.00	0.00
ATOM 186	1HB	HIS A	16	133.337	3.623	-0.849	1.00	0.00
ATOM 187	2HB	HIS A	16	133.806	3.445	0.838	1.00	0.00
ATOM 188	HD1	HIS A	16	131.825	3.467	2.603	1.00	0.00
ATOM 189	HD2	HIS A	16	130.670	3.217	-1.381	1.00	0.00
ATOM 190	HE1	HIS A	16	129.425	2.718	2.646	1.00	0.00
ATOM 191	HE2	HIS A	16	128.774	2.491	0.222	1.00	0.00
ATOM 192	N	GLY A	17	135.217	5.537	1.779	1.00	0.00
ATOM 193	CA	GLY A	17	135.887	5.834	3.032	1.00	0.00
ATOM 194	C	GLY A	17	137.270	5.217	3.109	1.00	0.00
ATOM 195	O	GLY A	17	137.577	4.481	4.045	1.00	0.00
ATOM 196	H	GLY A	17	135.718	5.132	1.041	1.00	0.00
ATOM 197	1HA	GLY A	17	135.976	6.905	3.134	1.00	0.00
ATOM 198	2HA	GLY A	17	135.289	5.453	3.846	1.00	0.00
ATOM 199	N	LEU A	18	138.106	5.519	2.121	1.00	0.00
ATOM 200	CA	LEU A	18	139.464	4.989	2.080	1.00	0.00
ATOM 201	C	LEU A	18	140.482	6.077	2.411	1.00	0.00
ATOM 202	O	LEU A	18	140.788	6.929	1.578	1.00	0.00
ATOM 203	CB	LEU A	18	139.763	4.398	0.701	1.00	0.00
ATOM 204	CG	LEU A	18	139.023	3.098	0.381	1.00	0.00
ATOM 205	CD1	LEU A	18	138.916	2.902	-1.124	1.00	0.00
ATOM 206	CD2	LEU A	18	139.726	1.914	1.027	1.00	0.00
ATOM 207	H	LEU A	18	137.802	6.112	1.403	1.00	0.00
ATOM 208	HA	LEU A	18	139.537	4.207	2.821	1.00	0.00
ATOM 209	1HB	LEU A	18	139.500	5.133	-0.046	1.00	0.00
ATOM 210	2HB	LEU A	18	140.824	4.207	0.636	1.00	0.00

ATOM 211	HG	LEU A	18	138.021	3.154	0.781	1.00	0.00
ATOM 212	1HD1	LEU A	18	138.964	1.848	-1.354	1.00	0.00
ATOM 213	2HD1	LEU A	18	139.732	3.415	-1.612	1.00	0.00
ATOM 214	3HD1	LEU A	18	137.978	3.305	-1.473	1.00	0.00
ATOM 215	1HD2	LEU A	18	139.773	2.062	2.095	1.00	0.00
ATOM 216	2HD2	LEU A	18	140.726	1.828	0.630	1.00	0.00
ATOM 217	3HD2	LEU A	18	139.175	1.009	0.813	1.00	0.00
ATOM 218	N	GLU A	19	141.003	6.039	3.633	1.00	0.00
ATOM 219	CA	GLU A	19	141.987	7.021	4.076	1.00	0.00
ATOM 220	C	GLU A	19	143.003	6.385	5.019	1.00	0.00
ATOM 221	O	GLU A	19	142.915	5.198	5.333	1.00	0.00
ATOM 222	CB	GLU A	19	141.291	8.193	4.771	1.00	0.00
ATOM 223	CG	GLU A	19	140.354	7.767	5.889	1.00	0.00
ATOM 224	CD	GLU A	19	139.186	8.717	6.064	1.00	0.00
ATOM 225	OE1	GLU A	19	138.168	8.543	5.361	1.00	0.00
ATOM 226	OE2	GLU A	19	139.287	9.634	6.905	1.00	0.00
ATOM 227	H	GLU A	19	140.719	5.335	4.253	1.00	0.00
ATOM 228	HA	GLU A	19	142.504	7.388	3.202	1.00	0.00
ATOM 229	1HB	GLU A	19	142.043	8.845	5.190	1.00	0.00
ATOM 230	2HB	GLU A	19	140.717	8.741	4.040	1.00	0.00
ATOM 231	1HG	GLU A	19	139.968	6.784	5.664	1.00	0.00
ATOM 232	2HG	GLU A	19	140.911	7.730	6.814	1.00	0.00
ATOM 233	N	VAL A	20	143.968	7.183	5.466	1.00	0.00
ATOM 234	CA	VAL A	20	145.001	6.699	6.374	1.00	0.00
ATOM 235	C	VAL A	20	144.390	6.120	7.646	1.00	0.00
ATOM 236	O	VAL A	20	143.480	6.706	8.230	1.00	0.00
ATOM 237	CB	VAL A	20	145.985	7.822	6.754	1.00	0.00
ATOM 238	CG1	VAL A	20	147.147	7.267	7.563	1.00	0.00
ATOM 239	CG2	VAL A	20	146.487	8.537	5.508	1.00	0.00

ATOM 240	H	VAL A	20	143.984	8.120	5.180	1.00	0.00
ATOM 241	HA	VAL A	20	145.554	5.922	5.865	1.00	0.00
ATOM 242	HB	VAL A	20	145.460	8.540	7.368	1.00	0.00
ATOM 243	1HG1	VAL A	20	147.999	7.923	7.468	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.406	6.286	7.194	1.00	0.00
ATOM 245	3HG1	VAL A	20	146.861	7.195	8.602	1.00	0.00
ATOM 246	1HG2	VAL A	20	146.440	7.864	4.665	1.00	0.00
ATOM 247	2HG2	VAL A	20	147.508	8.853	5.661	1.00	0.00
ATOM 248	3HG2	VAL A	20	145.868	9.401	5.315	1.00	0.00
ATOM 249	N	GLY A	21	144.897	4.967	8.068	1.00	0.00
ATOM 250	CA	GLY A	21	144.389	4.329	9.267	1.00	0.00
ATOM 251	C	GLY A	21	143.329	3.289	8.967	1.00	0.00
ATOM 252	O	GLY A	21	143.299	2.225	9.586	1.00	0.00
ATOM 253	H	GLY A	21	145.624	4.546	7.561	1.00	0.00
ATOM 254	1HA	GLY A	21	145.208	3.852	9.784	1.00	0.00
ATOM 255	2HA	GLY A	21	143.963	5.084	9.912	1.00	0.00
ATOM 256	N	SER A	22	142.455	3.595	8.013	1.00	0.00
ATOM 257	CA	SER A	22	141.387	2.679	7.631	1.00	0.00
ATOM 258	C	SER A	22	141.933	1.524	6.796	1.00	0.00
ATOM 259	O	SER A	22	142.942	1.668	6.106	1.00	0.00
ATOM 260	CB	SER A	22	140.304	3.423	6.847	1.00	0.00
ATOM 261	OG	SER A	22	140.042	4.693	7.418	1.00	0.00
ATOM 262	H	SER A	22	142.530	4.459	7.555	1.00	0.00
ATOM 263	HA	SER A	22	140.953	2.280	8.535	1.00	0.00
ATOM 264	1HB	SER A	22	140.632	3.561	5.828	1.00	0.00
ATOM 265	2HB	SER A	22	139.393	2.842	6.856	1.00	0.00
ATOM 266	HG	SER A	22	139.251	5.065	7.021	1.00	0.00
ATOM 267	N	LEU A	23	141.259	0.381	6.865	1.00	0.00
ATOM 268	CA	LEU A	23	141.677	-0.798	6.116	1.00	0.00



ATOM 269	C	LEU A	23	141.131	-0.761	4.693	1.00	0.00
ATOM 270	O	LEU A	23	140.073	-0.186	4.438	1.00	0.00
ATOM 271	CB	LEU A	23	141.206	-2.070	6.824	1.00	0.00
ATOM 272	CG	LEU A	23	141.688	-2.224	8.267	1.00	0.00
ATOM 273	CD1	LEU A	23	140.698	-3.049	9.075	1.00	0.00
ATOM 274	CD2	LEU A	23	143.069	-2.862	8.302	1.00	0.00
ATOM 275	H	LEU A	23	140.463	0.329	7.434	1.00	0.00
ATOM 276	HA	LEU A	23	142.756	-0.799	6.074	1.00	0.00
ATOM 277	1HB	LEU A	23	140.126	-2.077	6.823	1.00	0.00
ATOM 278	2HB	LEU A	23	141.555	-2.921	6.259	1.00	0.00
ATOM 279	HG	LEU A	23	141.758	-1.248	8.722	1.00	0.00
ATOM 280	1HD1	LEU A	23	140.860	-4.098	8.880	1.00	0.00
ATOM 281	2HD1	LEU A	23	139.691	-2.781	8.791	1.00	0.00
ATOM 282	3HD1	LEU A	23	140.840	-2.852	10.127	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.649	-2.423	9.100	1.00	0.00
ATOM 284	2HD2	LEU A	23	143.568	-2.691	7.359	1.00	0.00
ATOM 285	3HD2	LEU A	23	142.970	-3.924	8.469	1.00	0.00
ATOM 286	N	ALA A	24	141.859	-1.379	3.768	1.00	0.00
ATOM 287	CA	ALA A	24	141.447	-1.417	2.370	1.00	0.00
ATOM 288	C	ALA A	24	141.974	-2.668	1.676	1.00	0.00
ATOM 289	O	ALA A	24	142.870	-3.341	2.186	1.00	0.00
ATOM 290	CB	ALA A	24	141.925	-0.168	1.646	1.00	0.00
ATOM 291	H	ALA A	24	142.693	-1.820	4.032	1.00	0.00
ATOM 292	HA	ALA A	24	140.367	-1.430	2.341	1.00	0.00
ATOM 293	1HB	ALA A	24	141.383	-0.061	0.718	1.00	0.00
ATOM 294	2HB	ALA A	24	142.981	-0.255	1.439	1.00	0.00
ATOM 295	3HB	ALA A	24	141.749	0.698	2.267	1.00	0.00
ATOM 296	N	GLU A	25	141.413	-2.975	0.511	1.00	0.00
ATOM 297	CA	GLU A	25	141.827	-4.145	-0.252	1.00	0.00

ATOM 298	C	GLU A	25	142.061	-3.785	-1.716	1.00	0.00
ATOM 299	O	GLU A	25	141.346	-2.961	-2.285	1.00	0.00
ATOM 300	CB	GLU A	25	140.773	-5.248	-0.147	1.00	0.00
ATOM 301	CG	GLU A	25	141.270	-6.611	-0.600	1.00	0.00
ATOM 302	CD	GLU A	25	140.237	-7.371	-1.407	1.00	0.00
ATOM 303	OE1	GLU A	25	139.590	-8.277	-0.841	1.00	0.00
ATOM 304	OE2	GLU A	25	140.072	-7.060	-2.605	1.00	0.00
ATOM 305	H	GLU A	25	140.703	-2.399	0.156	1.00	0.00
ATOM 306	HA	GLU A	25	142.754	-4.505	0.169	1.00	0.00
ATOM 307	1HB	GLU A	25	140.453	-5.328	0.880	1.00	0.00
ATOM 308	2HB	GLU A	25	139.924	-4.978	-0.760	1.00	0.00
ATOM 309	1HG	GLU A	25	142.151	-6.474	-1.210	1.00	0.00
ATOM 310	2HG	GLU A	25	141.525	-7.194	0.273	1.00	0.00
ATOM 311	N	VAL A	26	143.066	-4.410	-2.321	1.00	0.00
ATOM 312	CA	VAL A	26	143.394	-4.156	-3.718	1.00	0.00
ATOM 313	C	VAL A	26	142.998	-5.336	-4.599	1.00	0.00
ATOM 314	O	VAL A	26	143.026	-6.486	-4.161	1.00	0.00
ATOM 315	CB	VAL A	26	144.898	-3.876	-3.901	1.00	0.00
ATOM 316	CG1	VAL A	26	145.188	-3.419	-5.322	1.00	0.00
ATOM 317	CG2	VAL A	26	145.374	-2.841	-2.892	1.00	0.00
ATOM 318	H	VAL A	26	143.601	-5.057	-1.815	1.00	0.00
ATOM 319	HA	VAL A	26	142.845	-3.282	-4.036	1.00	0.00
ATOM 320	HB	VAL A	26	145.438	-4.794	-3.724	1.00	0.00
ATOM 321	1HG1	VAL A	26	144.303	-2.967	-5.743	1.00	0.00
ATOM 322	2HG1	VAL A	26	145.477	-4.270	-5.921	1.00	0.00
ATOM 323	3HG1	VAL A	26	145.990	-2.697	-5.311	1.00	0.00
ATOM 324	1HG2	VAL A	26	145.426	-3.291	-1.912	1.00	0.00
ATOM 325	2HG2	VAL A	26	144.682	-2.013	-2.872	1.00	0.00
ATOM 326	3HG2	VAL A	26	146.354	-2.485	-3.177	1.00	0.00

ATOM 327	N	LYS A	27	142.631	-5.043	-5.842	1.00	0.00
ATOM 328	CA	LYS A	27	142.230	-6.080	-6.785	1.00	0.00
ATOM 329	C	LYS A	27	143.429	-6.587	-7.579	1.00	0.00
ATOM 330	O	LYS A	27	143.642	-6.187	-8.723	1.00	0.00
ATOM 331	CB	LYS A	27	141.161	-5.544	-7.739	1.00	0.00
ATOM 332	CG	LYS A	27	139.740	-5.743	-7.235	1.00	0.00
ATOM 333	CD	LYS A	27	139.084	-6.954	-7.879	1.00	0.00
ATOM 334	CE	LYS A	27	139.179	-8.181	-6.985	1.00	0.00
ATOM 335	NZ	LYS A	27	139.457	-9.418	-7.765	1.00	0.00
ATOM 336	H	LYS A	27	142.630	-4.106	-6.132	1.00	0.00
ATOM 337	HA	LYS A	27	141.815	-6.900	-6.219	1.00	0.00
ATOM 338	1HB	LYS A	27	141.323	-4.487	-7.886	1.00	0.00
ATOM 339	2HB	LYS A	27	141.257	-6.049	-8.689	1.00	0.00
ATOM 340	1HG	LYS A	27	139.765	-5.886	-6.166	1.00	0.00
ATOM 341	2HG	LYS A	27	139.159	-4.863	-7.470	1.00	0.00
ATOM 342	1HD	LYS A	27	138.044	-6.734	-8.061	1.00	0.00
ATOM 343	2HD	LYS A	27	139.579	-7.164	-8.816	1.00	0.00
ATOM 344	1HE	LYS A	27	139.976	-8.030	-6.272	1.00	0.00
ATOM 345	2HE	LYS A	27	138.244	-8.299	-6.459	1.00	0.00
ATOM 346	1HZ	LYS A	27	138.945	-10.223	-7.353	1.00	0.00
ATOM 347	2HZ	LYS A	27	140.475	-9.627	-7.756	1.00	0.00
ATOM 348	3HZ	LYS A	27	139.150	-9.294	-8.752	1.00	0.00
ATOM 349	N	GLU A	28	144.209	-7.469	-6.964	1.00	0.00
ATOM 350	CA	GLU A	28	145.388	-8.032	-7.613	1.00	0.00
ATOM 351	C	GLU A	28	145.339	-9.556	-7.602	1.00	0.00
ATOM 352	O	GLU A	28	144.374	-10.153	-7.126	1.00	0.00
ATOM 353	CB	GLU A	28	146.661	-7.544	-6.918	1.00	0.00
ATOM 354	CG	GLU A	28	147.726	-7.045	-7.879	1.00	0.00
ATOM 355	CD	GLU A	28	148.621	-5.987	-7.262	1.00	0.00

ATOM 356	OE1	GLU A	28	148.123	-4.875	-6.987	1.00	0.00
ATOM 357	OE2	GLU A	28	149.819	-6.271	-7.052	1.00	0.00
ATOM 358	H	GLU A	28	143.987	-7.749	-6.051	1.00	0.00
ATOM 359	HA	GLU A	28	145.396	-7.691	-8.638	1.00	0.00
ATOM 360	1HB	GLU A	28	146.405	-6.736	-6.249	1.00	0.00
ATOM 361	2HB	GLU A	28	147.079	-8.356	-6.341	1.00	0.00
ATOM 362	1HG	GLU A	28	148.340	-7.880	-8.183	1.00	0.00
ATOM 363	2HG	GLU A	28	147.241	-6.623	-8.748	1.00	0.00
ATOM 364	N	ASN A	29	146.388	-10.180	-8.131	1.00	0.00
ATOM 365	CA	ASN A	29	146.464	-11.635	-8.182	1.00	0.00
ATOM 366	C	ASN A	29	146.473	-12.229	-6.774	1.00	0.00
ATOM 367	O	ASN A	29	145.597	-13.017	-6.419	1.00	0.00
ATOM 368	CB	ASN A	29	147.717	-12.075	-8.943	1.00	0.00
ATOM 369	CG	ASN A	29	147.423	-12.410	-10.393	1.00	0.00
ATOM 370	OD1	ASN A	29	147.664	-13.530	-10.844	1.00	0.00
ATOM 371	ND2	ASN A	29	146.902	-11.437	-11.130	1.00	0.00
ATOM 372	H	ASN A	29	147.126	-9.650	-8.495	1.00	0.00
ATOM 373	HA	ASN A	29	145.590	-11.995	-8.705	1.00	0.00
ATOM 374	1HB	ASN A	29	148.444	-11.278	-8.918	1.00	0.00
ATOM 375	2HB	ASN A	29	148.132	-12.951	-8.467	1.00	0.00
ATOM 376	1HD2	ASN A	29	146.737	-10.570	-10.704	1.00	0.00
ATOM 377	2HD2	ASN A	29	146.701	-11.625	-12.071	1.00	0.00
ATOM 378	N	PRO A	30	147.468	-11.853	-5.951	1.00	0.00
ATOM 379	CA	PRO A	30	147.587	-12.350	-4.578	1.00	0.00
ATOM 380	C	PRO A	30	146.604	-11.669	-3.628	1.00	0.00
ATOM 381	O	PRO A	30	146.755	-10.489	-3.310	1.00	0.00
ATOM 382	CB	PRO A	30	149.025	-11.990	-4.206	1.00	0.00
ATOM 383	CG	PRO A	30	149.325	-10.773	-5.008	1.00	0.00
ATOM 384	CD	PRO A	30	148.555	-10.915	-6.295	1.00	0.00

ATOM 385	HA	PRO A	30	147.456	-13.420	-4.531	1.00	0.00
ATOM 386	1HB	PRO A	30	149.086	-11.793	-3.146	1.00	0.00
ATOM 387	2HB	PRO A	30	149.682	-12.806	-4.465	1.00	0.00
ATOM 388	1HG	PRO A	30	149.001	-9.892	-4.474	1.00	0.00
ATOM 389	2HG	PRO A	30	150.385	-10.720	-5.212	1.00	0.00
ATOM 390	1HD	PRO A	30	148.156	-9.960	-6.602	1.00	0.00
ATOM 391	2HD	PRO A	30	149.186	-11.325	-7.069	1.00	0.00
ATOM 392	N	PRO A	31	145.579	-12.403	-3.156	1.00	0.00
ATOM 393	CA	PRO A	31	144.575	-11.854	-2.239	1.00	0.00
ATOM 394	C	PRO A	31	145.149	-11.573	-0.854	1.00	0.00
ATOM 395	O	PRO A	31	145.083	-12.418	0.038	1.00	0.00
ATOM 396	CB	PRO A	31	143.517	-12.957	-2.165	1.00	0.00
ATOM 397	CG	PRO A	31	144.253	-14.209	-2.491	1.00	0.00
ATOM 398	CD	PRO A	31	145.317	-13.819	-3.478	1.00	0.00
ATOM 399	HA	PRO A	31	144.132	-10.951	-2.633	1.00	0.00
ATOM 400	1HB	PRO A	31	143.097	-12.991	-1.170	1.00	0.00
ATOM 401	2HB	PRO A	31	142.737	-12.761	-2.885	1.00	0.00
ATOM 402	1HG	PRO A	31	144.703	-14.614	-1.596	1.00	0.00
ATOM 403	2HG	PRO A	31	143.580	-14.929	-2.931	1.00	0.00
ATOM 404	1HD	PRO A	31	146.205	-14.418	-3.334	1.00	0.00
ATOM 405	2HD	PRO A	31	144.950	-13.923	-4.488	1.00	0.00
ATOM 406	N	PHE A	32	145.712	-10.382	-0.683	1.00	0.00
ATOM 407	CA	PHE A	32	146.298	-9.990	0.593	1.00	0.00
ATOM 408	C	PHE A	32	145.431	-8.947	1.292	1.00	0.00
ATOM 409	O	PHE A	32	144.494	-8.408	0.703	1.00	0.00
ATOM 410	CB	PHE A	32	147.709	-9.437	0.382	1.00	0.00
ATOM 411	CG	PHE A	32	147.801	-8.437	-0.735	1.00	0.00
ATOM 412	CD1	PHE A	32	148.541	-8.716	-1.873	1.00	0.00
ATOM 413	CD2	PHE A	32	147.149	-7.218	-0.646	1.00	0.00

ATOM 414	CE1	PHE	A	32	148.628	-7.799	-2.902	1.00	0.00
ATOM 415	CE2	PHE	A	32	147.233	-6.295	-1.672	1.00	0.00
ATOM 416	CZ	PHE	A	32	147.973	-6.586	-2.801	1.00	0.00
ATOM 417	H	PHE	A	32	145.734	-9.751	-1.433	1.00	0.00
ATOM 418	HA	PHE	A	32	146.355	-10.870	1.216	1.00	0.00
ATOM 419	1HB	PHE	A	32	148.038	-8.952	1.289	1.00	0.00
ATOM 420	2HB	PHE	A	32	148.377	-10.254	0.155	1.00	0.00
ATOM 421	HD1	PHE	A	32	149.052	-9.664	-1.952	1.00	0.00
ATOM 422	HD2	PHE	A	32	146.571	-6.989	0.237	1.00	0.00
ATOM 423	HE1	PHE	A	32	149.208	-8.027	-3.784	1.00	0.00
ATOM 424	HE2	PHE	A	32	146.719	-5.348	-1.590	1.00	0.00
ATOM 425	HZ	PHE	A	32	148.039	-5.867	-3.604	1.00	0.00
ATOM 426	N	TYR	A	33	145.750	-8.668	2.552	1.00	0.00
ATOM 427	CA	TYR	A	33	145.000	-7.690	3.332	1.00	0.00
ATOM 428	C	TYR	A	33	145.940	-6.694	4.004	1.00	0.00
ATOM 429	O	TYR	A	33	146.852	-7.081	4.734	1.00	0.00
ATOM 430	CB	TYR	A	33	144.147	-8.395	4.388	1.00	0.00
ATOM 431	CG	TYR	A	33	142.780	-8.803	3.888	1.00	0.00
ATOM 432	CD1	TYR	A	33	141.996	-7.922	3.154	1.00	0.00
ATOM 433	CD2	TYR	A	33	142.273	-10.070	4.151	1.00	0.00
ATOM 434	CE1	TYR	A	33	140.746	-8.291	2.696	1.00	0.00
ATOM 435	CE2	TYR	A	33	141.023	-10.447	3.696	1.00	0.00
ATOM 436	CZ	TYR	A	33	140.264	-9.554	2.970	1.00	0.00
ATOM 437	OH	TYR	A	33	139.019	-9.926	2.514	1.00	0.00
ATOM 438	H	TYR	A	33	146.508	-9.131	2.967	1.00	0.00
ATOM 439	HA	TYR	A	33	144.351	-7.155	2.655	1.00	0.00
ATOM 440	1HB	TYR	A	33	144.659	-9.288	4.717	1.00	0.00
ATOM 441	2HB	TYR	A	33	144.010	-7.734	5.230	1.00	0.00
ATOM 442	HD1	TYR	A	33	142.376	-6.934	2.941	1.00	0.00

ATOM 443	HD2	TYR A	33	142.869	-10.766	4.721	1.00	0.00
ATOM 444	HE1	TYR A	33	140.152	-7.592	2.126	1.00	0.00
ATOM 445	HE2	TYR A	33	140.646	-11.436	3.910	1.00	0.00
ATOM 446	HH	TYR A	33	139.088	-10.756	2.037	1.00	0.00
ATOM 447	N	GLY A	34	145.710	-5.410	3.751	1.00	0.00
ATOM 448	CA	GLY A	34	146.544	-4.378	4.337	1.00	0.00
ATOM 449	C	GLY A	34	145.757	-3.138	4.711	1.00	0.00
ATOM 450	O	GLY A	34	144.578	-3.019	4.378	1.00	0.00
ATOM 451	H	GLY A	34	144.969	-5.161	3.160	1.00	0.00
ATOM 452	1HA	GLY A	34	147.016	-4.774	5.225	1.00	0.00
ATOM 453	2HA	GLY A	34	147.312	-4.103	3.628	1.00	0.00
ATOM 454	N	VAL A	35	146.409	-2.212	5.406	1.00	0.00
ATOM 455	CA	VAL A	35	145.764	-0.974	5.827	1.00	0.00
ATOM 456	C	VAL A	35	146.453	0.240	5.212	1.00	0.00
ATOM 457	O	VAL A	35	147.668	0.241	5.013	1.00	0.00
ATOM 458	CB	VAL A	35	145.763	-0.835	7.362	1.00	0.00
ATOM 459	CG1	VAL A	35	147.187	-0.811	7.901	1.00	0.00
ATOM 460	CG2	VAL A	35	145.001	0.411	7.788	1.00	0.00
ATOM 461	H	VAL A	35	147.348	-2.365	5.642	1.00	0.00
ATOM 462	HA	VAL A	35	144.738	-1.002	5.489	1.00	0.00
ATOM 463	HB	VAL A	35	145.262	-1.697	7.781	1.00	0.00
ATOM 464	1HG1	VAL A	35	147.865	-0.519	7.113	1.00	0.00
ATOM 465	2HG1	VAL A	35	147.453	-1.795	8.258	1.00	0.00
ATOM 466	3HG1	VAL A	35	147.252	-0.103	8.714	1.00	0.00
ATOM 467	1HG2	VAL A	35	145.141	0.574	8.847	1.00	0.00
ATOM 468	2HG2	VAL A	35	143.950	0.278	7.581	1.00	0.00
ATOM 469	3HG2	VAL A	35	145.372	1.265	7.241	1.00	0.00
ATOM 470	N	ILE A	36	145.670	1.271	4.913	1.00	0.00
ATOM 471	CA	ILE A	36	146.207	2.491	4.322	1.00	0.00

ATOM 472	C	ILE A	36	147.127	3.214	5.300	1.00	0.00
ATOM 473	O	ILE A	36	146.803	3.363	6.478	1.00	0.00
ATOM 474	CB	ILE A	36	145.080	3.449	3.888	1.00	0.00
ATOM 475	CG1	ILE A	36	144.064	2.715	3.011	1.00	0.00
ATOM 476	CG2	ILE A	36	145.658	4.648	3.147	1.00	0.00
ATOM 477	CD1	ILE A	36	142.904	3.583	2.573	1.00	0.00
ATOM 478	H	ILE A	36	144.709	1.210	5.097	1.00	0.00
ATOM 479	HA	ILE A	36	146.775	2.215	3.445	1.00	0.00
ATOM 480	HB	ILE A	36	144.584	3.811	4.775	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.560	2.354	2.122	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.663	1.876	3.560	1.00	0.00
ATOM 483	1HG2	ILE A	36	146.620	4.385	2.734	1.00	0.00
ATOM 484	2HG2	ILE A	36	145.776	5.472	3.835	1.00	0.00
ATOM 485	3HG2	ILE A	36	144.989	4.936	2.351	1.00	0.00
ATOM 486	1HD1	ILE A	36	142.384	3.954	3.443	1.00	0.00
ATOM 487	2HD1	ILE A	36	142.225	2.999	1.970	1.00	0.00
ATOM 488	3HD1	ILE A	36	143.276	4.415	1.994	1.00	0.00
ATOM 489	N	ARG A	37	148.276	3.661	4.804	1.00	0.00
ATOM 490	CA	ARG A	37	149.245	4.367	5.633	1.00	0.00
ATOM 491	C	ARG A	37	149.477	5.782	5.116	1.00	0.00
ATOM 492	O	ARG A	37	149.185	6.761	5.804	1.00	0.00
ATOM 493	CB	ARG A	37	150.569	3.602	5.672	1.00	0.00
ATOM 494	CG	ARG A	37	150.404	2.115	5.937	1.00	0.00
ATOM 495	CD	ARG A	37	150.291	1.823	7.424	1.00	0.00
ATOM 496	NE	ARG A	37	149.079	2.397	8.006	1.00	0.00
ATOM 497	CZ	ARG A	37	148.908	2.602	9.309	1.00	0.00
ATOM 498	NH1	ARG A	37	149.866	2.280	10.170	1.00	0.00
ATOM 499	NH2	ARG A	37	147.775	3.129	9.754	1.00	0.00
ATOM 500	H	ARG A	37	148.478	3.510	3.857	1.00	0.00



ATOM 501	HA	ARG A	37	148.844	4.424	6.635	1.00	0.00
ATOM 502	1HB	ARG A	37	151.068	3.724	4.723	1.00	0.00
ATOM 503	2HB	ARG A	37	151.188	4.018	6.452	1.00	0.00
ATOM 504	1HG	ARG A	37	149.508	1.768	5.443	1.00	0.00
ATOM 505	2HG	ARG A	37	151.261	1.592	5.540	1.00	0.00
ATOM 506	1HD	ARG A	37	150.274	0.753	7.568	1.00	0.00
ATOM 507	2HD	ARG A	37	151.152	2.240	7.926	1.00	0.00
ATOM 508	HE	ARG A	37	148.356	2.643	7.392	1.00	0.00
ATOM 509	1HH1	ARG A	37	150.722	1.882	9.843	1.00	0.00
ATOM 510	2HH1	ARG A	37	149.730	2.437	11.149	1.00	0.00
ATOM 511	1HH2	ARG A	37	147.050	3.372	9.109	1.00	0.00
ATOM 512	2HH2	ARG A	37	147.646	3.282	10.734	1.00	0.00
ATOM 513	N	TRP A	38	150.004	5.886	3.900	1.00	0.00
ATOM 514	CA	TRP A	38	150.274	7.185	3.294	1.00	0.00
ATOM 515	C	TRP A	38	149.557	7.323	1.954	1.00	0.00
ATOM 516	O	TRP A	38	149.618	6.430	1.110	1.00	0.00
ATOM 517	CB	TRP A	38	151.783	7.382	3.104	1.00	0.00
ATOM 518	CG	TRP A	38	152.128	8.579	2.267	1.00	0.00
ATOM 519	CD1	TRP A	38	152.387	9.844	2.710	1.00	0.00
ATOM 520	CD2	TRP A	38	152.247	8.620	0.840	1.00	0.00
ATOM 521	NE1	TRP A	38	152.659	10.670	1.646	1.00	0.00
ATOM 522	CE2	TRP A	38	152.579	9.941	0.486	1.00	0.00
ATOM 523	CE3	TRP A	38	152.104	7.668	-0.174	1.00	0.00
ATOM 524	CZ2	TRP A	38	152.771	10.333	-0.836	1.00	0.00
ATOM 525	CZ3	TRP A	38	152.296	8.057	-1.486	1.00	0.00
ATOM 526	CH2	TRP A	38	152.625	9.380	-1.807	1.00	0.00
ATOM 527	H	TRP A	38	150.216	5.071	3.400	1.00	0.00
ATOM 528	HA	TRP A	38	149.904	7.945	3.964	1.00	0.00
ATOM 529	1HB	TRP A	38	152.247	7.508	4.071	1.00	0.00

ATOM 530	2HB	TRP A	38	152.195	6.507	2.623	1.00	0.00
ATOM 531	HD1	TRP A	38	152.376	10.139	3.748	1.00	0.00
ATOM 532	HE1	TRP A	38	152.875	11.623	1.706	1.00	0.00
ATOM 533	HE3	TRP A	38	151.850	6.644	0.055	1.00	0.00
ATOM 534	HZ2	TRP A	38	153.022	11.349	-1.102	1.00	0.00
ATOM 535	HZ3	TRP A	38	152.189	7.335	-2.281	1.00	0.00
ATOM 536	HH2	TRP A	38	152.765	9.638	-2.847	1.00	0.00
ATOM 537	N	ILE A	39	148.889	8.456	1.765	1.00	0.00
ATOM 538	CA	ILE A	39	148.169	8.727	0.528	1.00	0.00
ATOM 539	C	ILE A	39	148.631	10.044	-0.083	1.00	0.00
ATOM 540	O	ILE A	39	148.297	11.119	0.414	1.00	0.00
ATOM 541	CB	ILE A	39	146.647	8.785	0.762	1.00	0.00
ATOM 542	CG1	ILE A	39	146.181	7.562	1.554	1.00	0.00
ATOM 543	CG2	ILE A	39	145.911	8.876	-0.567	1.00	0.00
ATOM 544	CD1	ILE A	39	144.818	7.736	2.187	1.00	0.00
ATOM 545	H	ILE A	39	148.887	9.132	2.475	1.00	0.00
ATOM 546	HA	ILE A	39	148.378	7.924	-0.165	1.00	0.00
ATOM 547	HB	ILE A	39	146.427	9.678	1.328	1.00	0.00
ATOM 548	1HG1	ILE A	39	146.134	6.710	0.893	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.891	7.360	2.342	1.00	0.00
ATOM 550	1HG2	ILE A	39	146.058	9.857	-0.994	1.00	0.00
ATOM 551	2HG2	ILE A	39	144.856	8.708	-0.405	1.00	0.00
ATOM 552	3HG2	ILE A	39	146.295	8.127	-1.243	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.725	8.742	2.569	1.00	0.00
ATOM 554	2HD1	ILE A	39	144.706	7.032	2.998	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.052	7.559	1.446	1.00	0.00
ATOM 556	N	GLY A	40	149.407	9.955	-1.159	1.00	0.00
ATOM 557	CA	GLY A	40	149.906	11.152	-1.808	1.00	0.00
ATOM 558	C	GLY A	40	150.448	10.884	-3.197	1.00	0.00

ATOM 559	O	GLY A	40	150.274	9.794	-3.742	1.00	0.00
ATOM 560	H	GLY A	40	149.646	9.072	-1.510	1.00	0.00
ATOM 561	1HA	GLY A	40	149.104	11.870	-1.880	1.00	0.00
ATOM 562	2HA	GLY A	40	150.693	11.572	-1.202	1.00	0.00
ATOM 563	N	GLN A	41	151.109	11.884	-3.769	1.00	0.00
ATOM 564	CA	GLN A	41	151.683	11.763	-5.103	1.00	0.00
ATOM 565	C	GLN A	41	153.162	12.148	-5.090	1.00	0.00
ATOM 566	O	GLN A	41	153.506	13.302	-4.830	1.00	0.00
ATOM 567	CB	GLN A	41	150.919	12.654	-6.082	1.00	0.00
ATOM 568	CG	GLN A	41	149.411	12.488	-6.004	1.00	0.00
ATOM 569	CD	GLN A	41	148.672	13.804	-6.138	1.00	0.00
ATOM 570	OE1	GLN A	41	148.635	14.607	-5.206	1.00	0.00
ATOM 571	NE2	GLN A	41	148.077	14.033	-7.304	1.00	0.00
ATOM 572	H	GLN A	41	151.213	12.728	-3.282	1.00	0.00
ATOM 573	HA	GLN A	41	151.588	10.735	-5.415	1.00	0.00
ATOM 574	1HB	GLN A	41	151.157	13.685	-5.871	1.00	0.00
ATOM 575	2HB	GLN A	41	151.235	12.418	-7.086	1.00	0.00
ATOM 576	1HG	GLN A	41	149.090	11.832	-6.799	1.00	0.00
ATOM 577	2HG	GLN A	41	149.158	12.046	-5.051	1.00	0.00
ATOM 578	1HE2	GLN A	41	148.148	13.349	-8.000	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.594	14.878	-7.418	1.00	0.00
ATOM 580	N	PRO A	42	154.062	11.187	-5.368	1.00	0.00
ATOM 581	CA	PRO A	42	155.507	11.441	-5.381	1.00	0.00
ATOM 582	C	PRO A	42	155.892	12.546	-6.360	1.00	0.00
ATOM 583	O	PRO A	42	155.139	12.859	-7.283	1.00	0.00
ATOM 584	CB	PRO A	42	156.107	10.102	-5.822	1.00	0.00
ATOM 585	CG	PRO A	42	155.065	9.090	-5.491	1.00	0.00
ATOM 586	CD	PRO A	42	153.749	9.784	-5.689	1.00	0.00
ATOM 587	HA	PRO A	42	155.871	11.695	-4.396	1.00	0.00

ATOM 588	1HB	PRO A	42	156.311	10.129	-6.882	1.00	0.00
ATOM 589	2HB	PRO A	42	157.022	9.918	-5.279	1.00	0.00
ATOM 590	1HG	PRO A	42	155.148	8.245	-6.157	1.00	0.00
ATOM 591	2HG	PRO A	42	155.173	8.774	-4.464	1.00	0.00
ATOM 592	1HD	PRO A	42	153.419	9.686	-6.713	1.00	0.00
ATOM 593	2HD	PRO A	42	153.007	9.389	-5.010	1.00	0.00
ATOM 594	N	PRO A	43	157.076	13.153	-6.172	1.00	0.00
ATOM 595	CA	PRO A	43	157.559	14.227	-7.043	1.00	0.00
ATOM 596	C	PRO A	43	157.974	13.715	-8.417	1.00	0.00
ATOM 597	O	PRO A	43	159.140	13.389	-8.642	1.00	0.00
ATOM 598	CB	PRO A	43	158.771	14.776	-6.291	1.00	0.00
ATOM 599	CG	PRO A	43	159.256	13.633	-5.468	1.00	0.00
ATOM 600	CD	PRO A	43	158.034	12.839	-5.096	1.00	0.00
ATOM 601	HA	PRO A	43	156.820	15.006	-7.159	1.00	0.00
ATOM 602	1HB	PRO A	43	159.519	15.100	-7.000	1.00	0.00
ATOM 603	2HB	PRO A	43	158.469	15.608	-5.673	1.00	0.00
ATOM 604	1HG	PRO A	43	159.935	13.027	-6.048	1.00	0.00
ATOM 605	2HG	PRO A	43	159.747	14.004	-4.580	1.00	0.00
ATOM 606	1HD	PRO A	43	158.262	11.783	-5.079	1.00	0.00
ATOM 607	2HD	PRO A	43	157.654	13.158	-4.137	1.00	0.00
ATOM 608	N	GLY A	44	157.015	13.646	-9.332	1.00	0.00
ATOM 609	CA	GLY A	44	157.304	13.172	-10.672	1.00	0.00
ATOM 610	C	GLY A	44	156.071	12.647	-11.380	1.00	0.00
ATOM 611	O	GLY A	44	155.783	13.041	-12.510	1.00	0.00
ATOM 612	H	GLY A	44	156.104	13.919	-9.097	1.00	0.00
ATOM 613	1HA	GLY A	44	157.716	13.985	-11.248	1.00	0.00
ATOM 614	2HA	GLY A	44	158.035	12.380	-10.612	1.00	0.00
ATOM 615	N	LEU A	45	155.344	11.756	-10.716	1.00	0.00
ATOM 616	CA	LEU A	45	154.136	11.177	-11.291	1.00	0.00

ATOM 617	C	LEU A	45	152.926	11.462	-10.410	1.00	0.00
ATOM 618	O	LEU A	45	152.826	10.948	-9.296	1.00	0.00
ATOM 619	CB	LEU A	45	154.307	9.668	-11.472	1.00	0.00
ATOM 620	CG	LEU A	45	154.840	8.927	-10.245	1.00	0.00
ATOM 621	CD1	LEU A	45	154.467	7.451	-10.307	1.00	0.00
ATOM 622	CD2	LEU A	45	156.350	9.096	-10.132	1.00	0.00
ATOM 623	H	LEU A	45	155.624	11.483	-9.816	1.00	0.00
ATOM 624	HA	LEU A	45	153.977	11.632	-12.258	1.00	0.00
ATOM 625	1HB	LEU A	45	153.346	9.248	-11.733	1.00	0.00
ATOM 626	2HB	LEU A	45	154.989	9.500	-12.292	1.00	0.00
ATOM 627	HG	LEU A	45	154.389	9.345	-9.357	1.00	0.00
ATOM 628	1HD1	LEU A	45	153.870	7.266	-11.188	1.00	0.00
ATOM 629	2HD1	LEU A	45	153.901	7.186	-9.427	1.00	0.00
ATOM 630	3HD1	LEU A	45	155.365	6.852	-10.350	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.683	9.843	-10.837	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.836	8.157	-10.349	1.00	0.00
ATOM 633	3HD2	LEU A	45	156.602	9.408	-9.130	1.00	0.00
ATOM 634	N	ASN A	46	152.008	12.282	-10.911	1.00	0.00
ATOM 635	CA	ASN A	46	150.810	12.622	-10.156	1.00	0.00
ATOM 636	C	ASN A	46	149.846	11.443	-10.124	1.00	0.00
ATOM 637	O	ASN A	46	149.218	11.110	-11.130	1.00	0.00
ATOM 638	CB	ASN A	46	150.123	13.843	-10.773	1.00	0.00
ATOM 639	CG	ASN A	46	149.380	14.670	-9.743	1.00	0.00
ATOM 640	OD1	ASN A	46	149.955	15.100	-8.743	1.00	0.00
ATOM 641	ND2	ASN A	46	148.095	14.900	-9.984	1.00	0.00
ATOM 642	H	ASN A	46	152.139	12.664	-11.804	1.00	0.00
ATOM 643	HA	ASN A	46	151.108	12.858	-9.146	1.00	0.00
ATOM 644	1HB	ASN A	46	150.868	14.469	-11.241	1.00	0.00
ATOM 645	2HB	ASN A	46	149.417	13.511	-11.519	1.00	0.00

ATOM 646	1HD2	ASN	A	46	147.703	14.526	-10.801	1.00	0.00
ATOM 647	2HD2	ASN	A	46	147.590	15.433	-9.335	1.00	0.00
ATOM 648	N	GLU	A	47	149.734	10.813	-8.961	1.00	0.00
ATOM 649	CA	GLU	A	47	148.848	9.668	-8.790	1.00	0.00
ATOM 650	C	GLU	A	47	148.661	9.345	-7.312	1.00	0.00
ATOM 651	O	GLU	A	47	149.627	9.062	-6.604	1.00	0.00
ATOM 652	CB	GLU	A	47	149.405	8.446	-9.525	1.00	0.00
ATOM 653	CG	GLU	A	47	150.918	8.314	-9.439	1.00	0.00
ATOM 654	CD	GLU	A	47	151.479	7.357	-10.472	1.00	0.00
ATOM 655	OE1	GLU	A	47	151.460	7.702	-11.672	1.00	0.00
ATOM 656	OE2	GLU	A	47	151.937	6.263	-10.082	1.00	0.00
ATOM 657	H	GLU	A	47	150.262	11.125	-8.197	1.00	0.00
ATOM 658	HA	GLU	A	47	147.889	9.926	-9.214	1.00	0.00
ATOM 659	1HB	GLU	A	47	148.964	7.555	-9.103	1.00	0.00
ATOM 660	2HB	GLU	A	47	149.131	8.513	-10.568	1.00	0.00
ATOM 661	1HG	GLU	A	47	151.360	9.285	-9.592	1.00	0.00
ATOM 662	2HG	GLU	A	47	151.180	7.952	-8.455	1.00	0.00
ATOM 663	N	VAL	A	48	147.416	9.382	-6.851	1.00	0.00
ATOM 664	CA	VAL	A	48	147.116	9.085	-5.457	1.00	0.00
ATOM 665	C	VAL	A	48	147.475	7.642	-5.124	1.00	0.00
ATOM 666	O	VAL	A	48	146.726	6.717	-5.438	1.00	0.00
ATOM 667	CB	VAL	A	48	145.629	9.320	-5.137	1.00	0.00
ATOM 668	CG1	VAL	A	48	145.378	9.198	-3.642	1.00	0.00
ATOM 669	CG2	VAL	A	48	145.180	10.679	-5.652	1.00	0.00
ATOM 670	H	VAL	A	48	146.684	9.609	-7.462	1.00	0.00
ATOM 671	HA	VAL	A	48	147.709	9.745	-4.840	1.00	0.00
ATOM 672	HB	VAL	A	48	145.048	8.560	-5.639	1.00	0.00
ATOM 673	1HG1	VAL	A	48	144.420	9.634	-3.401	1.00	0.00
ATOM 674	2HG1	VAL	A	48	146.156	9.719	-3.103	1.00	0.00

ATOM 675	3HG1	VAL A	48	145.381	8.155	-3.360	1.00	0.00
ATOM 676	1HG2	VAL A	48	144.227	10.934	-5.213	1.00	0.00
ATOM 677	2HG2	VAL A	48	145.083	10.644	-6.726	1.00	0.00
ATOM 678	3HG2	VAL A	48	145.912	11.426	-5.381	1.00	0.00
ATOM 679	N	LEU A	49	148.629	7.455	-4.492	1.00	0.00
ATOM 680	CA	LEU A	49	149.088	6.123	-4.122	1.00	0.00
ATOM 681	C	LEU A	49	148.955	5.904	-2.621	1.00	0.00
ATOM 682	O	LEU A	49	149.633	6.554	-1.825	1.00	0.00
ATOM 683	CB	LEU A	49	150.544	5.923	-4.550	1.00	0.00
ATOM 684	CG	LEU A	49	150.801	6.069	-6.051	1.00	0.00
ATOM 685	CD1	LEU A	49	152.275	6.335	-6.317	1.00	0.00
ATOM 686	CD2	LEU A	49	150.342	4.822	-6.793	1.00	0.00
ATOM 687	H	LEU A	49	149.185	8.231	-4.270	1.00	0.00
ATOM 688	HA	LEU A	49	148.470	5.404	-4.636	1.00	0.00
ATOM 689	1HB	LEU A	49	151.153	6.649	-4.030	1.00	0.00
ATOM 690	2HB	LEU A	49	150.854	4.935	-4.249	1.00	0.00
ATOM 691	HG	LEU A	49	150.237	6.910	-6.427	1.00	0.00
ATOM 692	1HD1	LEU A	49	152.707	6.843	-5.468	1.00	0.00
ATOM 693	2HD1	LEU A	49	152.376	6.954	-7.197	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.788	5.398	-6.475	1.00	0.00
ATOM 695	1HD2	LEU A	49	151.185	4.165	-6.951	1.00	0.00
ATOM 696	2HD2	LEU A	49	149.921	5.104	-7.746	1.00	0.00
ATOM 697	3HD2	LEU A	49	149.593	4.311	-6.206	1.00	0.00
ATOM 698	N	ALA A	50	148.077	4.984	-2.240	1.00	0.00
ATOM 699	CA	ALA A	50	147.856	4.682	-0.832	1.00	0.00
ATOM 700	C	ALA A	50	148.756	3.542	-0.369	1.00	0.00
ATOM 701	O	ALA A	50	148.624	2.408	-0.830	1.00	0.00
ATOM 702	CB	ALA A	50	146.395	4.337	-0.589	1.00	0.00
ATOM 703	H	ALA A	50	147.565	4.497	-2.920	1.00	0.00

ATOM 704	HA	ALA A	50	148.093	5.570	-0.265	1.00	0.00
ATOM 705	1HB	ALA A	50	145.792	4.740	-1.389	1.00	0.00
ATOM 706	2HB	ALA A	50	146.077	4.763	0.352	1.00	0.00
ATOM 707	3HB	ALA A	50	146.278	3.265	-0.556	1.00	0.00
ATOM 708	N	GLY A	51	149.671	3.850	0.545	1.00	0.00
ATOM 709	CA	GLY A	51	150.578	2.839	1.056	1.00	0.00
ATOM 710	C	GLY A	51	149.878	1.821	1.933	1.00	0.00
ATOM 711	O	GLY A	51	149.350	2.162	2.991	1.00	0.00
ATOM 712	H	GLY A	51	149.730	4.770	0.876	1.00	0.00
ATOM 713	1HA	GLY A	51	151.034	2.326	0.221	1.00	0.00
ATOM 714	2HA	GLY A	51	151.352	3.324	1.631	1.00	0.00
ATOM 715	N	LEU A	52	149.873	0.567	1.494	1.00	0.00
ATOM 716	CA	LEU A	52	149.232	-0.504	2.247	1.00	0.00
ATOM 717	C	LEU A	52	150.270	-1.379	2.943	1.00	0.00
ATOM 718	O	LEU A	52	151.305	-1.710	2.364	1.00	0.00
ATOM 719	CB	LEU A	52	148.365	-1.360	1.322	1.00	0.00
ATOM 720	CG	LEU A	52	147.140	-0.650	0.742	1.00	0.00
ATOM 721	CD1	LEU A	52	146.534	-1.469	-0.388	1.00	0.00
ATOM 722	CD2	LEU A	52	146.108	-0.394	1.830	1.00	0.00
ATOM 723	H	LEU A	52	150.311	0.356	0.643	1.00	0.00
ATOM 724	HA	LEU A	52	148.601	-0.050	2.997	1.00	0.00
ATOM 725	1HB	LEU A	52	148.980	-1.701	0.501	1.00	0.00
ATOM 726	2HB	LEU A	52	148.024	-2.221	1.876	1.00	0.00
ATOM 727	HG	LEU A	52	147.444	0.305	0.336	1.00	0.00
ATOM 728	1HD1	LEU A	52	145.929	-0.828	-1.012	1.00	0.00
ATOM 729	2HD1	LEU A	52	145.918	-2.253	0.027	1.00	0.00
ATOM 730	3HD1	LEU A	52	147.324	-1.906	-0.979	1.00	0.00
ATOM 731	1HD2	LEU A	52	146.587	0.078	2.675	1.00	0.00
ATOM 732	2HD2	LEU A	52	145.673	-1.332	2.141	1.00	0.00



ATOM 733	3HD2	LEU A	52	145.334	0.254	1.447	1.00	0.00
ATOM 734	N	GLU A	53	149.985	-1.750	4.187	1.00	0.00
ATOM 735	CA	GLU A	53	150.892	-2.587	4.962	1.00	0.00
ATOM 736	C	GLU A	53	150.367	-4.015	5.058	1.00	0.00
ATOM 737	O	GLU A	53	149.392	-4.282	5.759	1.00	0.00
ATOM 738	CB	GLU A	53	151.084	-2.006	6.365	1.00	0.00
ATOM 739	CG	GLU A	53	152.053	-2.799	7.225	1.00	0.00
ATOM 740	CD	GLU A	53	151.694	-2.758	8.697	1.00	0.00
ATOM 741	OE1	GLU A	53	152.597	-2.965	9.535	1.00	0.00
ATOM 742	OE2	GLU A	53	150.510	-2.518	9.013	1.00	0.00
ATOM 743	H	GLU A	53	149.143	-1.454	4.594	1.00	0.00
ATOM 744	HA	GLU A	53	151.846	-2.599	4.455	1.00	0.00
ATOM 745	1HB	GLU A	53	151.457	-0.996	6.276	1.00	0.00
ATOM 746	2HB	GLU A	53	150.127	-1.982	6.865	1.00	0.00
ATOM 747	1HG	GLU A	53	152.046	-3.828	6.898	1.00	0.00
ATOM 748	2HG	GLU A	53	153.045	-2.389	7.100	1.00	0.00
ATOM 749	N	LEU A	54	151.021	-4.929	4.348	1.00	0.00
ATOM 750	CA	LEU A	54	150.618	-6.331	4.353	1.00	0.00
ATOM 751	C	LEU A	54	150.983	-6.997	5.676	1.00	0.00
ATOM 752	O	LEU A	54	152.069	-6.783	6.212	1.00	0.00
ATOM 753	CB	LEU A	54	151.282	-7.078	3.194	1.00	0.00
ATOM 754	CG	LEU A	54	151.184	-6.382	1.835	1.00	0.00
ATOM 755	CD1	LEU A	54	152.187	-6.976	0.859	1.00	0.00
ATOM 756	CD2	LEU A	54	149.771	-6.491	1.283	1.00	0.00
ATOM 757	H	LEU A	54	151.791	-4.655	3.808	1.00	0.00
ATOM 758	HA	LEU A	54	149.547	-6.369	4.227	1.00	0.00
ATOM 759	1HB	LEU A	54	152.327	-7.213	3.433	1.00	0.00
ATOM 760	2HB	LEU A	54	150.821	-8.050	3.109	1.00	0.00
ATOM 761	HG	LEU A	54	151.417	-5.334	1.957	1.00	0.00

ATOM 762	1HD1	LEU A	54	151.706	-7.745	0.272	1.00	0.00
ATOM 763	2HD1	LEU A	54	153.012	-7.406	1.407	1.00	0.00
ATOM 764	3HD1	LEU A	54	152.555	-6.200	0.205	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.795	-6.380	0.209	1.00	0.00
ATOM 766	2HD2	LEU A	54	149.156	-5.713	1.712	1.00	0.00
ATOM 767	3HD2	LEU A	54	149.359	-7.457	1.536	1.00	0.00
ATOM 768	N	GLU A	55	150.065	-7.806	6.197	1.00	0.00
ATOM 769	CA	GLU A	55	150.290	-8.504	7.458	1.00	0.00
ATOM 770	C	GLU A	55	151.347	-9.593	7.295	1.00	0.00
ATOM 771	O	GLU A	55	152.090	-9.894	8.229	1.00	0.00
ATOM 772	CB	GLU A	55	148.983	-9.117	7.965	1.00	0.00
ATOM 773	CG	GLU A	55	147.843	-8.118	8.067	1.00	0.00
ATOM 774	CD	GLU A	55	147.017	-8.302	9.326	1.00	0.00
ATOM 775	OE1	GLU A	55	147.071	-9.401	9.916	1.00	0.00
ATOM 776	OE2	GLU A	55	146.318	-7.346	9.722	1.00	0.00
ATOM 777	H	GLU A	55	149.218	-7.937	5.723	1.00	0.00
ATOM 778	HA	GLU A	55	150.642	-7.782	8.179	1.00	0.00
ATOM 779	1HB	GLU A	55	148.683	-9.906	7.291	1.00	0.00
ATOM 780	2HB	GLU A	55	149.154	-9.538	8.945	1.00	0.00
ATOM 781	1HG	GLU A	55	148.254	-7.120	8.069	1.00	0.00
ATOM 782	2HG	GLU A	55	147.198	-8.239	7.210	1.00	0.00
ATOM 783	N	ASP A	56	151.406	-10.179	6.103	1.00	0.00
ATOM 784	CA	ASP A	56	152.372	-11.234	5.818	1.00	0.00
ATOM 785	C	ASP A	56	153.664	-10.651	5.256	1.00	0.00
ATOM 786	O	ASP A	56	153.650	-9.931	4.258	1.00	0.00
ATOM 787	CB	ASP A	56	151.781	-12.241	4.830	1.00	0.00
ATOM 788	CG	ASP A	56	150.691	-13.091	5.453	1.00	0.00
ATOM 789	OD1	ASP A	56	149.769	-13.504	4.718	1.00	0.00
ATOM 790	OD2	ASP A	56	150.759	-13.342	6.674	1.00	0.00

ATOM 791	H	ASP A	56	150.786	-9.895	5.399	1.00	0.00
ATOM 792	HA	ASP A	56	152.593	-11.741	6.745	1.00	0.00
ATOM 793	1HB	ASP A	56	151.362	-11.708	3.990	1.00	0.00
ATOM 794	2HB	ASP A	56	152.566	-12.895	4.480	1.00	0.00
ATOM 795	N	GLU A	57	154.781	-10.966	5.905	1.00	0.00
ATOM 796	CA	GLU A	57	156.083	-10.474	5.470	1.00	0.00
ATOM 797	C	GLU A	57	156.427	-10.999	4.080	1.00	0.00
ATOM 798	O	GLU A	57	156.851	-12.145	3.927	1.00	0.00
ATOM 799	CB	GLU A	57	157.167	-10.886	6.467	1.00	0.00
ATOM 800	CG	GLU A	57	157.113	-10.116	7.776	1.00	0.00
ATOM 801	CD	GLU A	57	157.985	-10.733	8.852	1.00	0.00
ATOM 802	OE1	GLU A	57	158.567	-9.973	9.653	1.00	0.00
ATOM 803	OE2	GLU A	57	158.086	-11.977	8.892	1.00	0.00
ATOM 804	H	GLU A	57	154.728	-11.545	6.694	1.00	0.00
ATOM 805	HA	GLU A	57	156.033	-9.396	5.431	1.00	0.00
ATOM 806	1HB	GLU A	57	157.056	-11.937	6.687	1.00	0.00
ATOM 807	2HB	GLU A	57	158.135	-10.721	6.017	1.00	0.00
ATOM 808	1HG	GLU A	57	157.448	-9.105	7.599	1.00	0.00
ATOM 809	2HG	GLU A	57	156.092	-10.099	8.127	1.00	0.00
ATOM 810	N	CYS A	58	156.242	-10.156	3.070	1.00	0.00
ATOM 811	CA	CYS A	58	156.533	-10.535	1.693	1.00	0.00
ATOM 812	C	CYS A	58	157.946	-10.114	1.300	1.00	0.00
ATOM 813	O	CYS A	58	158.303	-8.939	1.397	1.00	0.00
ATOM 814	CB	CYS A	58	155.516	-9.904	0.742	1.00	0.00
ATOM 815	SG	CYS A	58	154.053	-10.924	0.443	1.00	0.00
ATOM 816	H	CYS A	58	155.901	-9.256	3.256	1.00	0.00
ATOM 817	HA	CYS A	58	156.460	-11.611	1.623	1.00	0.00
ATOM 818	1HB	CYS A	58	155.181	-8.965	1.156	1.00	0.00
ATOM 819	2HB	CYS A	58	155.991	-9.722	-0.212	1.00	0.00

ATOM 820	HG	CYS A	58	153.934	-10.999	-0.506	1.00	0.00
ATOM 821	N	ALA A	59	158.744	-11.079	0.855	1.00	0.00
ATOM 822	CA	ALA A	59	160.117	-10.807	0.448	1.00	0.00
ATOM 823	C	ALA A	59	160.156	-9.970	-0.826	1.00	0.00
ATOM 824	O	ALA A	59	159.813	-10.450	-1.907	1.00	0.00
ATOM 825	CB	ALA A	59	160.876	-12.111	0.249	1.00	0.00
ATOM 826	H	ALA A	59	158.402	-11.995	0.801	1.00	0.00
ATOM 827	HA	ALA A	59	160.598	-10.256	1.243	1.00	0.00
ATOM 828	1HB	ALA A	59	160.889	-12.363	-0.801	1.00	0.00
ATOM 829	2HB	ALA A	59	160.387	-12.900	0.802	1.00	0.00
ATOM 830	3HB	ALA A	59	161.889	-11.995	0.605	1.00	0.00
ATOM 831	N	GLY A	60	160.576	-8.716	-0.692	1.00	0.00
ATOM 832	CA	GLY A	60	160.651	-7.832	-1.840	1.00	0.00
ATOM 833	C	GLY A	60	160.053	-6.468	-1.563	1.00	0.00
ATOM 834	O	GLY A	60	160.466	-5.470	-2.152	1.00	0.00
ATOM 835	H	GLY A	60	160.836	-8.388	0.194	1.00	0.00
ATOM 836	1HA	GLY A	60	161.688	-7.708	-2.117	1.00	0.00
ATOM 837	2HA	GLY A	60	160.122	-8.286	-2.665	1.00	0.00
ATOM 838	N	CYS A	61	159.074	-6.425	-0.664	1.00	0.00
ATOM 839	CA	CYS A	61	158.416	-5.173	-0.311	1.00	0.00
ATOM 840	C	CYS A	61	159.344	-4.284	0.510	1.00	0.00
ATOM 841	O	CYS A	61	160.455	-4.683	0.860	1.00	0.00
ATOM 842	CB	CYS A	61	157.132	-5.451	0.472	1.00	0.00
ATOM 843	SG	CYS A	61	156.021	-6.631	-0.329	1.00	0.00
ATOM 844	H	CYS A	61	158.788	-7.255	-0.229	1.00	0.00
ATOM 845	HA	CYS A	61	158.164	-4.661	-1.227	1.00	0.00
ATOM 846	1HB	CYS A	61	157.389	-5.850	1.442	1.00	0.00
ATOM 847	2HB	CYS A	61	156.591	-4.525	0.602	1.00	0.00
ATOM 848	HG	CYS A	61	155.639	-7.189	0.354	1.00	0.00

ATOM 849	N	THR A	62	158.881	-3.076	0.816	1.00	0.00
ATOM 850	CA	THR A	62	159.669	-2.129	1.596	1.00	0.00
ATOM 851	C	THR A	62	159.163	-2.056	3.034	1.00	0.00
ATOM 852	O	THR A	62	158.177	-2.701	3.389	1.00	0.00
ATOM 853	CB	THR A	62	159.619	-0.742	0.955	1.00	0.00
ATOM 854	OG1	THR A	62	158.314	-0.454	0.483	1.00	0.00
ATOM 855	CG2	THR A	62	160.573	-0.585	-0.208	1.00	0.00
ATOM 856	H	THR A	62	157.987	-2.815	0.509	1.00	0.00
ATOM 857	HA	THR A	62	160.691	-2.476	1.603	1.00	0.00
ATOM 858	HB	THR A	62	159.881	-0.003	1.699	1.00	0.00
ATOM 859	HG1	THR A	62	157.782	-0.107	1.204	1.00	0.00
ATOM 860	1HG2	THR A	62	160.889	-1.560	-0.549	1.00	0.00
ATOM 861	2HG2	THR A	62	161.435	-0.018	0.108	1.00	0.00
ATOM 862	3HG2	THR A	62	160.076	-0.066	-1.014	1.00	0.00
ATOM 863	N	ASP A	63	159.847	-1.268	3.857	1.00	0.00
ATOM 864	CA	ASP A	63	159.467	-1.109	5.255	1.00	0.00
ATOM 865	C	ASP A	63	158.836	0.257	5.497	1.00	0.00
ATOM 866	O	ASP A	63	158.965	0.829	6.578	1.00	0.00
ATOM 867	CB	ASP A	63	160.689	-1.287	6.160	1.00	0.00
ATOM 868	CG	ASP A	63	161.787	-0.290	5.849	1.00	0.00
ATOM 869	OD1	ASP A	63	162.647	-0.600	4.998	1.00	0.00
ATOM 870	OD2	ASP A	63	161.789	0.801	6.458	1.00	0.00
ATOM 871	H	ASP A	63	160.625	-0.779	3.514	1.00	0.00
ATOM 872	HA	ASP A	63	158.743	-1.875	5.490	1.00	0.00
ATOM 873	1HB	ASP A	63	160.388	-1.156	7.188	1.00	0.00
ATOM 874	2HB	ASP A	63	161.083	-2.284	6.029	1.00	0.00
ATOM 875	N	GLY A	64	158.152	0.775	4.482	1.00	0.00
ATOM 876	CA	GLY A	64	157.511	2.071	4.603	1.00	0.00
ATOM 877	C	GLY A	64	158.215	3.146	3.799	1.00	0.00

ATOM 878	O	GLY A	64	158.375	4.274	4.263	1.00	0.00
ATOM 879	H	GLY A	64	158.083	0.274	3.642	1.00	0.00
ATOM 880	1HA	GLY A	64	156.490	1.989	4.257	1.00	0.00
ATOM 881	2HA	GLY A	64	157.505	2.362	5.643	1.00	0.00
ATOM 882	N	THR A	65	158.638	2.795	2.589	1.00	0.00
ATOM 883	CA	THR A	65	159.329	3.737	1.717	1.00	0.00
ATOM 884	C	THR A	65	158.943	3.515	0.260	1.00	0.00
ATOM 885	O	THR A	65	159.044	2.402	-0.257	1.00	0.00
ATOM 886	CB	THR A	65	160.844	3.600	1.884	1.00	0.00
ATOM 887	OG1	THR A	65	161.250	2.258	1.686	1.00	0.00
ATOM 888	CG2	THR A	65	161.338	4.034	3.246	1.00	0.00
ATOM 889	H	THR A	65	158.481	1.880	2.275	1.00	0.00
ATOM 890	HA	THR A	65	159.034	4.734	2.008	1.00	0.00
ATOM 891	HB	THR A	65	161.334	4.215	1.143	1.00	0.00
ATOM 892	HG1	THR A	65	160.827	1.907	0.900	1.00	0.00
ATOM 893	1HG2	THR A	65	160.554	4.569	3.761	1.00	0.00
ATOM 894	2HG2	THR A	65	162.197	4.679	3.129	1.00	0.00
ATOM 895	3HG2	THR A	65	161.619	3.164	3.822	1.00	0.00
ATOM 896	N	PHE A	66	158.503	4.581	-0.399	1.00	0.00
ATOM 897	CA	PHE A	66	158.101	4.504	-1.799	1.00	0.00
ATOM 898	C	PHE A	66	159.101	5.230	-2.694	1.00	0.00
ATOM 899	O	PHE A	66	159.198	6.457	-2.665	1.00	0.00
ATOM 900	CB	PHE A	66	156.705	5.101	-1.985	1.00	0.00
ATOM 901	CG	PHE A	66	156.083	4.770	-3.311	1.00	0.00
ATOM 902	CD1	PHE A	66	155.689	5.778	-4.177	1.00	0.00
ATOM 903	CD2	PHE A	66	155.893	3.452	-3.692	1.00	0.00
ATOM 904	CE1	PHE A	66	155.116	5.476	-5.398	1.00	0.00
ATOM 905	CE2	PHE A	66	155.321	3.144	-4.912	1.00	0.00
ATOM 906	CZ	PHE A	66	154.932	4.158	-5.766	1.00	0.00

ATOM 907	H	PHE A	66	158.446	5.442	0.066	1.00	0.00
ATOM 908	HA	PHE A	66	158.077	3.461	-2.080	1.00	0.00
ATOM 909	1HB	PHE A	66	156.055	4.726	-1.211	1.00	0.00
ATOM 910	2HB	PHE A	66	156.768	6.176	-1.906	1.00	0.00
ATOM 911	HD1	PHE A	66	155.833	6.809	-3.891	1.00	0.00
ATOM 912	HD2	PHE A	66	156.196	2.659	-3.026	1.00	0.00
ATOM 913	HE1	PHE A	66	154.813	6.271	-6.064	1.00	0.00
ATOM 914	HE2	PHE A	66	155.178	2.112	-5.197	1.00	0.00
ATOM 915	HZ	PHE A	66	154.485	3.919	-6.720	1.00	0.00
ATOM 916	N	ARG A	67	159.843	4.465	-3.487	1.00	0.00
ATOM 917	CA	ARG A	67	160.835	5.035	-4.390	1.00	0.00
ATOM 918	C	ARG A	67	161.898	5.807	-3.615	1.00	0.00
ATOM 919	O	ARG A	67	162.370	6.853	-4.062	1.00	0.00
ATOM 920	CB	ARG A	67	160.158	5.956	-5.408	1.00	0.00
ATOM 921	CG	ARG A	67	158.907	5.359	-6.030	1.00	0.00
ATOM 922	CD	ARG A	67	158.567	6.031	-7.350	1.00	0.00
ATOM 923	NE	ARG A	67	157.502	5.330	-8.063	1.00	0.00
ATOM 924	CZ	ARG A	67	157.666	4.161	-8.677	1.00	0.00
ATOM 925	NH1	ARG A	67	158.849	3.558	-8.668	1.00	0.00
ATOM 926	NH2	ARG A	67	156.644	3.591	-9.302	1.00	0.00
ATOM 927	H	ARG A	67	159.719	3.493	-3.465	1.00	0.00
ATOM 928	HA	ARG A	67	161.311	4.220	-4.917	1.00	0.00
ATOM 929	1HB	ARG A	67	159.886	6.877	-4.916	1.00	0.00
ATOM 930	2HB	ARG A	67	160.859	6.174	-6.199	1.00	0.00
ATOM 931	1HG	ARG A	67	159.071	4.306	-6.206	1.00	0.00
ATOM 932	2HG	ARG A	67	158.080	5.488	-5.346	1.00	0.00
ATOM 933	1HD	ARG A	67	158.248	7.043	-7.152	1.00	0.00
ATOM 934	2HD	ARG A	67	159.452	6.048	-7.969	1.00	0.00
ATOM 935	HE	ARG A	67	156.618	5.753	-8.086	1.00	0.00

ATOM 936	1HH1	ARG A	67	159.623	3.982	-8.199	1.00	0.00
ATOM 937	2HH1	ARG A	67	158.966	2.679	-9.131	1.00	0.00
ATOM 938	1HH2	ARG A	67	155.752	4.040	-9.312	1.00	0.00
ATOM 939	2HH2	ARG A	67	156.767	2.712	-9.763	1.00	0.00
ATOM 940	N	GLY A	68	162.269	5.284	-2.451	1.00	0.00
ATOM 941	CA	GLY A	68	163.274	5.938	-1.632	1.00	0.00
ATOM 942	C	GLY A	68	162.724	7.136	-0.883	1.00	0.00
ATOM 943	O	GLY A	68	163.458	8.076	-0.580	1.00	0.00
ATOM 944	H	GLY A	68	161.859	4.449	-2.145	1.00	0.00
ATOM 945	1HA	GLY A	68	163.658	5.225	-0.917	1.00	0.00
ATOM 946	2HA	GLY A	68	164.084	6.265	-2.268	1.00	0.00
ATOM 947	N	THR A	69	161.430	7.102	-0.584	1.00	0.00
ATOM 948	CA	THR A	69	160.783	8.193	0.133	1.00	0.00
ATOM 949	C	THR A	69	159.899	7.658	1.256	1.00	0.00
ATOM 950	O	THR A	69	158.746	7.291	1.030	1.00	0.00
ATOM 951	CB	THR A	69	159.948	9.040	-0.828	1.00	0.00
ATOM 952	OG1	THR A	69	160.661	9.285	-2.028	1.00	0.00
ATOM 953	CG2	THR A	69	159.546	10.380	-0.251	1.00	0.00
ATOM 954	H	THR A	69	160.897	6.324	-0.852	1.00	0.00
ATOM 955	HA	THR A	69	161.556	8.811	0.565	1.00	0.00
ATOM 956	HB	THR A	69	159.044	8.501	-1.074	1.00	0.00
ATOM 957	HG1	THR A	69	160.425	8.623	-2.681	1.00	0.00
ATOM 958	1HG2	THR A	69	159.640	11.143	-1.010	1.00	0.00
ATOM 959	2HG2	THR A	69	160.189	10.619	0.583	1.00	0.00
ATOM 960	3HG2	THR A	69	158.521	10.334	0.087	1.00	0.00
ATOM 961	N	ARG A	70	160.448	7.616	2.465	1.00	0.00
ATOM 962	CA	ARG A	70	159.709	7.125	3.623	1.00	0.00
ATOM 963	C	ARG A	70	158.552	8.058	3.966	1.00	0.00
ATOM 964	O	ARG A	70	158.739	9.263	4.126	1.00	0.00



ATOM 965	CB	ARG A	70	160.641	6.985	4.828	1.00	0.00
ATOM 966	CG	ARG A	70	159.945	6.478	6.082	1.00	0.00
ATOM 967	CD	ARG A	70	159.718	7.595	7.090	1.00	0.00
ATOM 968	NE	ARG A	70	160.355	7.311	8.373	1.00	0.00
ATOM 969	CZ	ARG A	70	161.654	7.482	8.610	1.00	0.00
ATOM 970	NH1	ARG A	70	162.457	7.933	7.653	1.00	0.00
ATOM 971	NH2	ARG A	70	162.152	7.201	9.806	1.00	0.00
ATOM 972	H	ARG A	70	161.371	7.922	2.583	1.00	0.00
ATOM 973	HA	ARG A	70	159.310	6.153	3.374	1.00	0.00
ATOM 974	1HB	ARG A	70	161.433	6.293	4.577	1.00	0.00
ATOM 975	2HB	ARG A	70	161.075	7.949	5.046	1.00	0.00
ATOM 976	1HG	ARG A	70	158.990	6.057	5.806	1.00	0.00
ATOM 977	2HG	ARG A	70	160.558	5.714	6.537	1.00	0.00
ATOM 978	1HD	ARG A	70	160.124	8.513	6.692	1.00	0.00
ATOM 979	2HD	ARG A	70	158.654	7.709	7.245	1.00	0.00
ATOM 980	HE	ARG A	70	159.786	6.977	9.097	1.00	0.00
ATOM 981	1HH1	ARG A	70	162.087	8.147	6.749	1.00	0.00
ATOM 982	2HH1	ARG A	70	163.431	8.058	7.838	1.00	0.00
ATOM 983	1HH2	ARG A	70	161.552	6.861	10.530	1.00	0.00
ATOM 984	2HH2	ARG A	70	163.127	7.329	9.983	1.00	0.00
ATOM 985	N	TYR A	71	157.355	7.490	4.077	1.00	0.00
ATOM 986	CA	TYR A	71	156.166	8.269	4.402	1.00	0.00
ATOM 987	C	TYR A	71	155.674	7.950	5.809	1.00	0.00
ATOM 988	O	TYR A	71	155.102	8.804	6.486	1.00	0.00
ATOM 989	CB	TYR A	71	155.057	7.991	3.386	1.00	0.00
ATOM 990	CG	TYR A	71	155.312	8.601	2.026	1.00	0.00
ATOM 991	CD1	TYR A	71	155.252	7.827	0.874	1.00	0.00
ATOM 992	CD2	TYR A	71	155.614	9.951	1.894	1.00	0.00
ATOM 993	CE1	TYR A	71	155.486	8.380	-0.370	1.00	0.00

ATOM 994	CE2	TYR A	71	155.847	10.512	0.653	1.00	0.00
ATOM 995	CZ	TYR A	71	155.783	9.722	-0.476	1.00	0.00
ATOM 996	OH	TYR A	71	156.016	10.276	-1.713	1.00	0.00
ATOM 997	H	TYR A	71	157.270	6.524	3.937	1.00	0.00
ATOM 998	HA	TYR A	71	156.431	9.314	4.354	1.00	0.00
ATOM 999	1HB	TYR A	71	154.956	6.924	3.256	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.126	8.393	3.761	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.020	6.775	0.960	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.664	10.567	2.780	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.435	7.761	-1.254	1.00	0.00
ATOM 1004	HE2	TYR A	71	156.080	11.563	0.571	1.00	0.00
ATOM 1005	HH	TYR A	71	156.854	9.955	-2.056	1.00	0.00
ATOM 1006	N	PHE A	72	155.900	6.714	6.244	1.00	0.00
ATOM 1007	CA	PHE A	72	155.480	6.283	7.572	1.00	0.00
ATOM 1008	C	PHE A	72	156.457	5.262	8.147	1.00	0.00
ATOM 1009	O	PHE A	72	157.463	4.930	7.521	1.00	0.00
ATOM 1010	CB	PHE A	72	154.074	5.683	7.515	1.00	0.00
ATOM 1011	CG	PHE A	72	153.907	4.646	6.442	1.00	0.00
ATOM 1012	CD1	PHE A	72	153.991	3.296	6.745	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.664	5.020	5.130	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.838	2.340	5.760	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.510	4.068	4.140	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.597	2.726	4.456	1.00	0.00
ATOM 1017	H	PHE A	72	156.362	6.078	5.659	1.00	0.00
ATOM 1018	HA	PHE A	72	155.466	7.150	8.214	1.00	0.00
ATOM 1019	1HB	PHE A	72	153.850	5.219	8.463	1.00	0.00
ATOM 1020	2HB	PHE A	72	153.361	6.474	7.328	1.00	0.00
ATOM 1021	HD1	PHE A	72	154.180	2.993	7.765	1.00	0.00
ATOM 1022	HD2	PHE A	72	153.597	6.069	4.882	1.00	0.00

ATOM 1023	HE1	PHE	A	72	153.906	1.291	6.009	1.00	0.00
ATOM 1024	HE2	PHE	A	72	153.321	4.372	3.121	1.00	0.00
ATOM 1025	HZ	PHE	A	72	153.476	1.980	3.684	1.00	0.00
ATOM 1026	N	THR	A	73	156.152	4.768	9.342	1.00	0.00
ATOM 1027	CA	THR	A	73	157.003	3.784	10.003	1.00	0.00
ATOM 1028	C	THR	A	73	156.260	2.467	10.201	1.00	0.00
ATOM 1029	O	THR	A	73	155.275	2.404	10.938	1.00	0.00
ATOM 1030	CB	THR	A	73	157.485	4.319	11.352	1.00	0.00
ATOM 1031	OG1	THR	A	73	157.819	5.693	11.256	1.00	0.00
ATOM 1032	CG2	THR	A	73	158.697	3.588	11.888	1.00	0.00
ATOM 1033	H	THR	A	73	155.336	5.071	9.791	1.00	0.00
ATOM 1034	HA	THR	A	73	157.860	3.608	9.369	1.00	0.00
ATOM 1035	HB	THR	A	73	156.689	4.214	12.075	1.00	0.00
ATOM 1036	HG1	THR	A	73	157.943	6.054	12.137	1.00	0.00
ATOM 1037	1HG2	THR	A	73	158.608	3.479	12.959	1.00	0.00
ATOM 1038	2HG2	THR	A	73	159.589	4.151	11.656	1.00	0.00
ATOM 1039	3HG2	THR	A	73	158.759	2.610	11.431	1.00	0.00
ATOM 1040	N	CYS	A	74	156.736	1.418	9.539	1.00	0.00
ATOM 1041	CA	CYS	A	74	156.116	0.102	9.643	1.00	0.00
ATOM 1042	C	CYS	A	74	157.174	-0.992	9.725	1.00	0.00
ATOM 1043	O	CYS	A	74	158.373	-0.717	9.671	1.00	0.00
ATOM 1044	CB	CYS	A	74	155.198	-0.148	8.444	1.00	0.00
ATOM 1045	SG	CYS	A	74	153.512	0.467	8.665	1.00	0.00
ATOM 1046	H	CYS	A	74	157.524	1.531	8.967	1.00	0.00
ATOM 1047	HA	CYS	A	74	155.525	0.085	10.546	1.00	0.00
ATOM 1048	1HB	CYS	A	74	155.613	0.339	7.575	1.00	0.00
ATOM 1049	2HB	CYS	A	74	155.140	-1.211	8.261	1.00	0.00
ATOM 1050	HG	CYS	A	74	153.269	0.955	7.875	1.00	0.00
ATOM 1051	N	ALA	A	75	156.723	-2.236	9.856	1.00	0.00

ATOM 1052	CA	ALA A	75	157.631	-3.373	9.946	1.00	0.00
ATOM 1053	C	ALA A	75	158.416	-3.552	8.652	1.00	0.00
ATOM 1054	O	ALA A	75	158.263	-2.776	7.708	1.00	0.00
ATOM 1055	CB	ALA A	75	156.857	-4.640	10.276	1.00	0.00
ATOM 1056	H	ALA A	75	155.756	-2.393	9.894	1.00	0.00
ATOM 1057	HA	ALA A	75	158.325	-3.183	10.752	1.00	0.00
ATOM 1058	1HB	ALA A	75	156.841	-4.784	11.347	1.00	0.00
ATOM 1059	2HB	ALA A	75	157.337	-5.487	9.807	1.00	0.00
ATOM 1060	3HB	ALA A	75	155.846	-4.551	9.910	1.00	0.00
ATOM 1061	N	LEU A	76	159.258	-4.580	8.613	1.00	0.00
ATOM 1062	CA	LEU A	76	160.068	-4.861	7.434	1.00	0.00
ATOM 1063	C	LEU A	76	159.357	-5.842	6.507	1.00	0.00
ATOM 1064	O	LEU A	76	158.756	-6.816	6.960	1.00	0.00
ATOM 1065	CB	LEU A	76	161.428	-5.427	7.847	1.00	0.00
ATOM 1066	CG	LEU A	76	162.316	-4.465	8.637	1.00	0.00
ATOM 1067	CD1	LEU A	76	163.393	-5.228	9.391	1.00	0.00
ATOM 1068	CD2	LEU A	76	162.943	-3.436	7.708	1.00	0.00
ATOM 1069	H	LEU A	76	159.336	-5.163	9.397	1.00	0.00
ATOM 1070	HA	LEU A	76	160.219	-3.931	6.908	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.259	-6.307	8.451	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.959	-5.720	6.954	1.00	0.00
ATOM 1073	HG	LEU A	76	161.711	-3.938	9.361	1.00	0.00
ATOM 1074	1HD1	LEU A	76	164.253	-4.593	9.534	1.00	0.00
ATOM 1075	2HD1	LEU A	76	163.679	-6.102	8.824	1.00	0.00
ATOM 1076	3HD1	LEU A	76	163.009	-5.535	10.354	1.00	0.00
ATOM 1077	1HD2	LEU A	76	163.039	-3.855	6.717	1.00	0.00
ATOM 1078	2HD2	LEU A	76	163.920	-3.162	8.079	1.00	0.00
ATOM 1079	3HD2	LEU A	76	162.315	-2.558	7.666	1.00	0.00
ATOM 1080	N	LYS A	77	159.429	-5.577	5.207	1.00	0.00

ATOM 1081	CA	LYS A	77	158.793	-6.436	4.214	1.00	0.00
ATOM 1082	C	LYS A	77	157.283	-6.478	4.419	1.00	0.00
ATOM 1083	O	LYS A	77	156.656	-7.529	4.285	1.00	0.00
ATOM 1084	CB	LYS A	77	159.370	-7.851	4.288	1.00	0.00
ATOM 1085	CG	LYS A	77	160.884	-7.899	4.152	1.00	0.00
ATOM 1086	CD	LYS A	77	161.333	-7.461	2.766	1.00	0.00
ATOM 1087	CE	LYS A	77	162.582	-6.598	2.832	1.00	0.00
ATOM 1088	NZ	LYS A	77	162.254	-5.158	3.023	1.00	0.00
ATOM 1089	H	LYS A	77	159.924	-4.785	4.906	1.00	0.00
ATOM 1090	HA	LYS A	77	159.001	-6.024	3.238	1.00	0.00
ATOM 1091	1HB	LYS A	77	159.103	-8.287	5.239	1.00	0.00
ATOM 1092	2HB	LYS A	77	158.940	-8.445	3.496	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.323	-7.240	4.887	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.220	-8.910	4.327	1.00	0.00
ATOM 1095	1HD	LYS A	77	161.545	-8.337	2.174	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.538	-6.894	2.304	1.00	0.00
ATOM 1097	1HE	LYS A	77	163.191	-6.930	3.660	1.00	0.00
ATOM 1098	2HE	LYS A	77	163.134	-6.714	1.912	1.00	0.00
ATOM 1099	1HZ	LYS A	77	161.291	-4.963	2.679	1.00	0.00
ATOM 1100	2HZ	LYS A	77	162.925	-4.564	2.495	1.00	0.00
ATOM 1101	3HZ	LYS A	77	162.307	-4.909	4.032	1.00	0.00
ATOM 1102	N	LYS A	78	156.702	-5.327	4.745	1.00	0.00
ATOM 1103	CA	LYS A	78	155.265	-5.233	4.968	1.00	0.00
ATOM 1104	C	LYS A	78	154.741	-3.857	4.567	1.00	0.00
ATOM 1105	O	LYS A	78	153.838	-3.316	5.206	1.00	0.00
ATOM 1106	CB	LYS A	78	154.936	-5.509	6.436	1.00	0.00
ATOM 1107	CG	LYS A	78	155.439	-6.856	6.930	1.00	0.00
ATOM 1108	CD	LYS A	78	155.044	-7.103	8.377	1.00	0.00
ATOM 1109	CE	LYS A	78	153.565	-7.429	8.503	1.00	0.00

ATOM 1110	NZ	LYS A	78	153.262	-8.159	9.765	1.00	0.00
ATOM 1111	H	LYS A	78	157.254	-4.523	4.837	1.00	0.00
ATOM 1112	HA	LYS A	78	154.785	-5.980	4.355	1.00	0.00
ATOM 1113	1HB	LYS A	78	155.384	-4.737	7.045	1.00	0.00
ATOM 1114	2HB	LYS A	78	153.864	-5.480	6.566	1.00	0.00
ATOM 1115	1HG	LYS A	78	155.015	-7.635	6.314	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.516	-6.878	6.851	1.00	0.00
ATOM 1117	1HD	LYS A	78	155.619	-7.932	8.760	1.00	0.00
ATOM 1118	2HD	LYS A	78	155.259	-6.215	8.954	1.00	0.00
ATOM 1119	1HE	LYS A	78	153.003	-6.507	8.487	1.00	0.00
ATOM 1120	2HE	LYS A	78	153.271	-8.042	7.663	1.00	0.00
ATOM 1121	1HZ	LYS A	78	153.299	-9.186	9.602	1.00	0.00
ATOM 1122	2HZ	LYS A	78	152.312	-7.907	10.105	1.00	0.00
ATOM 1123	3HZ	LYS A	78	153.957	-7.909	10.497	1.00	0.00
ATOM 1124	N	ALA A	79	155.313	-3.298	3.507	1.00	0.00
ATOM 1125	CA	ALA A	79	154.904	-1.986	3.022	1.00	0.00
ATOM 1126	C	ALA A	79	154.827	-1.964	1.499	1.00	0.00
ATOM 1127	O	ALA A	79	155.846	-1.846	0.817	1.00	0.00
ATOM 1128	CB	ALA A	79	155.864	-0.916	3.519	1.00	0.00
ATOM 1129	H	ALA A	79	156.028	-3.779	3.040	1.00	0.00
ATOM 1130	HA	ALA A	79	153.924	-1.772	3.425	1.00	0.00
ATOM 1131	1HB	ALA A	79	156.388	-1.279	4.391	1.00	0.00
ATOM 1132	2HB	ALA A	79	155.310	-0.026	3.776	1.00	0.00
ATOM 1133	3HB	ALA A	79	156.578	-0.684	2.741	1.00	0.00
ATOM 1134	N	LEU A	80	153.612	-2.077	0.970	1.00	0.00
ATOM 1135	CA	LEU A	80	153.402	-2.069	-0.473	1.00	0.00
ATOM 1136	C	LEU A	80	152.484	-0.924	-0.884	1.00	0.00
ATOM 1137	O	LEU A	80	151.354	-0.818	-0.407	1.00	0.00
ATOM 1138	CB	LEU A	80	152.808	-3.404	-0.928	1.00	0.00

ATOM 1139	CG	LEU A	80	152.489	-3.494	-2.422	1.00	0.00
ATOM 1140	CD1	LEU A	80	153.744	-3.825	-3.216	1.00	0.00
ATOM 1141	CD2	LEU A	80	151.407	-4.534	-2.673	1.00	0.00
ATOM 1142	H	LEU A	80	152.839	-2.167	1.566	1.00	0.00
ATOM 1143	HA	LEU A	80	154.362	-1.934	-0.947	1.00	0.00
ATOM 1144	1HB	LEU A	80	153.508	-4.189	-0.682	1.00	0.00
ATOM 1145	2HB	LEU A	80	151.894	-3.573	-0.378	1.00	0.00
ATOM 1146	HG	LEU A	80	152.122	-2.537	-2.764	1.00	0.00
ATOM 1147	1HD1	LEU A	80	153.968	-4.877	-3.113	1.00	0.00
ATOM 1148	2HD1	LEU A	80	154.572	-3.243	-2.839	1.00	0.00
ATOM 1149	3HD1	LEU A	80	153.582	-3.590	-4.257	1.00	0.00
ATOM 1150	1HD2	LEU A	80	150.440	-4.054	-2.672	1.00	0.00
ATOM 1151	2HD2	LEU A	80	151.440	-5.282	-1.895	1.00	0.00
ATOM 1152	3HD2	LEU A	80	151.575	-5.003	-3.631	1.00	0.00
ATOM 1153	N	PHE A	81	152.977	-0.065	-1.770	1.00	0.00
ATOM 1154	CA	PHE A	81	152.201	1.074	-2.245	1.00	0.00
ATOM 1155	C	PHE A	81	151.396	0.705	-3.487	1.00	0.00
ATOM 1156	O	PHE A	81	151.813	-0.141	-4.280	1.00	0.00
ATOM 1157	CB	PHE A	81	153.123	2.254	-2.554	1.00	0.00
ATOM 1158	CG	PHE A	81	153.759	2.855	-1.332	1.00	0.00
ATOM 1159	CD1	PHE A	81	153.219	3.986	-0.740	1.00	0.00
ATOM 1160	CD2	PHE A	81	154.894	2.288	-0.775	1.00	0.00
ATOM 1161	CE1	PHE A	81	153.801	4.540	0.385	1.00	0.00
ATOM 1162	CE2	PHE A	81	155.479	2.838	0.349	1.00	0.00
ATOM 1163	CZ	PHE A	81	154.932	3.966	0.930	1.00	0.00
ATOM 1164	H	PHE A	81	153.885	-0.201	-2.114	1.00	0.00
ATOM 1165	HA	PHE A	81	151.517	1.359	-1.460	1.00	0.00
ATOM 1166	1HB	PHE A	81	153.914	1.922	-3.209	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.554	3.027	-3.048	1.00	0.00

ATOM 1168	HD1	PHE A	81	152.335	4.436	-1.166	1.00	0.00
ATOM 1169	HD2	PHE A	81	155.323	1.406	-1.228	1.00	0.00
ATOM 1170	HE1	PHE A	81	153.371	5.423	0.835	1.00	0.00
ATOM 1171	HE2	PHE A	81	156.364	2.387	0.773	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.389	4.398	1.808	1.00	0.00
ATOM 1173	N	VAL A	82	150.242	1.343	-3.650	1.00	0.00
ATOM 1174	CA	VAL A	82	149.380	1.081	-4.796	1.00	0.00
ATOM 1175	C	VAL A	82	148.465	2.268	-5.077	1.00	0.00
ATOM 1176	O	VAL A	82	148.334	3.174	-4.253	1.00	0.00
ATOM 1177	CB	VAL A	82	148.517	-0.175	-4.574	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.388	-1.419	-4.519	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.691	-0.038	-3.304	1.00	0.00
ATOM 1180	H	VAL A	82	149.965	2.006	-2.984	1.00	0.00
ATOM 1181	HA	VAL A	82	150.010	0.912	-5.656	1.00	0.00
ATOM 1182	HB	VAL A	82	147.839	-0.273	-5.409	1.00	0.00
ATOM 1183	1HG1	VAL A	82	150.172	-1.344	-5.260	1.00	0.00
ATOM 1184	2HG1	VAL A	82	148.784	-2.291	-4.723	1.00	0.00
ATOM 1185	3HG1	VAL A	82	149.829	-1.508	-3.538	1.00	0.00
ATOM 1186	1HG2	VAL A	82	146.737	-0.526	-3.441	1.00	0.00
ATOM 1187	2HG2	VAL A	82	147.531	1.009	-3.090	1.00	0.00
ATOM 1188	3HG2	VAL A	82	148.217	-0.497	-2.480	1.00	0.00
ATOM 1189	N	LYS A	83	147.834	2.257	-6.247	1.00	0.00
ATOM 1190	CA	LYS A	83	146.931	3.333	-6.639	1.00	0.00
ATOM 1191	C	LYS A	83	145.672	3.327	-5.778	1.00	0.00
ATOM 1192	O	LYS A	83	144.950	2.332	-5.724	1.00	0.00
ATOM 1193	CB	LYS A	83	146.554	3.198	-8.116	1.00	0.00
ATOM 1194	CG	LYS A	83	147.716	3.442	-9.064	1.00	0.00
ATOM 1195	CD	LYS A	83	147.351	3.082	-10.495	1.00	0.00
ATOM 1196	CE	LYS A	83	147.951	4.066	-11.487	1.00	0.00



ATOM 1197	NZ	LYS A	83	148.395	3.393	-12.739	1.00	0.00
ATOM 1198	H	LYS A	83	147.979	1.508	-6.862	1.00	0.00
ATOM 1199	HA	LYS A	83	147.446	4.270	-6.492	1.00	0.00
ATOM 1200	1HB	LYS A	83	146.178	2.201	-8.289	1.00	0.00
ATOM 1201	2HB	LYS A	83	145.776	3.912	-8.343	1.00	0.00
ATOM 1202	1HG	LYS A	83	147.988	4.486	-9.024	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.555	2.837	-8.753	1.00	0.00
ATOM 1204	1HD	LYS A	83	147.725	2.094	-10.715	1.00	0.00
ATOM 1205	2HD	LYS A	83	146.276	3.093	-10.596	1.00	0.00
ATOM 1206	1HE	LYS A	83	147.206	4.809	-11.733	1.00	0.00
ATOM 1207	2HE	LYS A	83	148.800	4.549	-11.027	1.00	0.00
ATOM 1208	1HZ	LYS A	83	148.832	2.476	-12.515	1.00	0.00
ATOM 1209	2HZ	LYS A	83	149.090	3.984	-13.235	1.00	0.00
ATOM 1210	3HZ	LYS A	83	147.580	3.233	-13.366	1.00	0.00
ATOM 1211	N	LEU A	84	145.417	4.445	-5.109	1.00	0.00
ATOM 1212	CA	LEU A	84	144.246	4.573	-4.250	1.00	0.00
ATOM 1213	C	LEU A	84	142.961	4.378	-5.049	1.00	0.00
ATOM 1214	O	LEU A	84	141.971	3.858	-4.535	1.00	0.00
ATOM 1215	CB	LEU A	84	144.237	5.944	-3.571	1.00	0.00
ATOM 1216	CG	LEU A	84	142.996	6.246	-2.730	1.00	0.00
ATOM 1217	CD1	LEU A	84	143.069	5.526	-1.392	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.846	7.745	-2.522	1.00	0.00
ATOM 1219	H	LEU A	84	146.031	5.204	-5.195	1.00	0.00
ATOM 1220	HA	LEU A	84	144.305	3.805	-3.493	1.00	0.00
ATOM 1221	1HB	LEU A	84	145.105	6.008	-2.929	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.320	6.701	-4.335	1.00	0.00
ATOM 1223	HG	LEU A	84	142.120	5.890	-3.253	1.00	0.00
ATOM 1224	1HD1	LEU A	84	143.969	5.817	-0.874	1.00	0.00
ATOM 1225	2HD1	LEU A	84	143.079	4.458	-1.559	1.00	0.00

ATOM 1226	3HD1	LEU A	84	142.208	5.788	-0.795	1.00	0.00
ATOM 1227	1HD2	LEU A	84	143.594	8.088	-1.824	1.00	0.00
ATOM 1228	2HD2	LEU A	84	141.862	7.959	-2.130	1.00	0.00
ATOM 1229	3HD2	LEU A	84	142.974	8.254	-3.466	1.00	0.00
ATOM 1230	N	LYS A	85	142.985	4.799	-6.310	1.00	0.00
ATOM 1231	CA	LYS A	85	141.821	4.669	-7.179	1.00	0.00
ATOM 1232	C	LYS A	85	141.476	3.201	-7.415	1.00	0.00
ATOM 1233	O	LYS A	85	140.323	2.860	-7.676	1.00	0.00
ATOM 1234	CB	LYS A	85	142.078	5.366	-8.517	1.00	0.00
ATOM 1235	CG	LYS A	85	143.400	4.979	-9.161	1.00	0.00
ATOM 1236	CD	LYS A	85	144.399	6.124	-9.118	1.00	0.00
ATOM 1237	CE	LYS A	85	144.251	7.037	-10.325	1.00	0.00
ATOM 1238	NZ	LYS A	85	144.698	8.426	-10.028	1.00	0.00
ATOM 1239	H	LYS A	85	143.802	5.205	-6.663	1.00	0.00
ATOM 1240	HA	LYS A	85	140.987	5.149	-6.689	1.00	0.00
ATOM 1241	1HB	LYS A	85	141.281	5.111	-9.201	1.00	0.00
ATOM 1242	2HB	LYS A	85	142.077	6.434	-8.360	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.814	4.134	-8.631	1.00	0.00
ATOM 1244	2HG	LYS A	85	143.222	4.706	-10.191	1.00	0.00
ATOM 1245	1HD	LYS A	85	144.235	6.700	-8.221	1.00	0.00
ATOM 1246	2HD	LYS A	85	145.399	5.715	-9.109	1.00	0.00
ATOM 1247	1HE	LYS A	85	144.847	6.643	-11.134	1.00	0.00
ATOM 1248	2HE	LYS A	85	143.212	7.057	-10.619	1.00	0.00
ATOM 1249	1HZ	LYS A	85	144.700	8.995	-10.899	1.00	0.00
ATOM 1250	2HZ	LYS A	85	145.659	8.416	-9.632	1.00	0.00
ATOM 1251	3HZ	LYS A	85	144.056	8.868	-9.338	1.00	0.00
ATOM 1252	N	SER A	86	142.483	2.338	-7.322	1.00	0.00
ATOM 1253	CA	SER A	86	142.283	0.908	-7.525	1.00	0.00
ATOM 1254	C	SER A	86	142.180	0.177	-6.191	1.00	0.00

ATOM 1255	O	SER A	86	142.582	-0.981	-6.073	1.00	0.00
ATOM 1256	CB	SER A	86	143.430	0.324	-8.352	1.00	0.00
ATOM 1257	OG	SER A	86	143.578	1.016	-9.581	1.00	0.00
ATOM 1258	H	SER A	86	143.380	2.669	-7.111	1.00	0.00
ATOM 1259	HA	SER A	86	141.358	0.777	-8.067	1.00	0.00
ATOM 1260	1HB	SER A	86	144.351	0.407	-7.794	1.00	0.00
ATOM 1261	2HB	SER A	86	143.228	-0.716	-8.561	1.00	0.00
ATOM 1262	HG	SER A	86	142.715	1.148	-9.979	1.00	0.00
ATOM 1263	N	CYS A	87	141.639	0.860	-5.188	1.00	0.00
ATOM 1264	CA	CYS A	87	141.482	0.275	-3.861	1.00	0.00
ATOM 1265	C	CYS A	87	140.008	0.152	-3.491	1.00	0.00
ATOM 1266	O	CYS A	87	139.153	0.819	-4.073	1.00	0.00
ATOM 1267	CB	CYS A	87	142.211	1.124	-2.818	1.00	0.00
ATOM 1268	SG	CYS A	87	143.995	0.839	-2.751	1.00	0.00
ATOM 1269	H	CYS A	87	141.337	1.779	-5.343	1.00	0.00
ATOM 1270	HA	CYS A	87	141.920	-0.712	-3.878	1.00	0.00
ATOM 1271	1HB	CYS A	87	142.055	2.168	-3.041	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.806	0.906	-1.840	1.00	0.00
ATOM 1273	HG	CYS A	87	144.366	1.082	-3.603	1.00	0.00
ATOM 1274	N	ARG A	88	139.715	-0.707	-2.519	1.00	0.00
ATOM 1275	CA	ARG A	88	138.344	-0.918	-2.072	1.00	0.00
ATOM 1276	C	ARG A	88	138.274	-0.998	-0.547	1.00	0.00
ATOM 1277	O	ARG A	88	139.152	-1.577	0.091	1.00	0.00
ATOM 1278	CB	ARG A	88	137.777	-2.198	-2.689	1.00	0.00
ATOM 1279	CG	ARG A	88	136.918	-1.952	-3.918	1.00	0.00
ATOM 1280	CD	ARG A	88	135.437	-1.957	-3.574	1.00	0.00
ATOM 1281	NE	ARG A	88	134.598	-2.033	-4.768	1.00	0.00
ATOM 1282	CZ	ARG A	88	133.279	-2.220	-4.736	1.00	0.00
ATOM 1283	NH1	ARG A	88	132.649	-2.351	-3.576	1.00	0.00

ATOM 1284	NH2	ARG A	88	132.592	-2.276	-5.868	1.00	0.00
ATOM 1285	H	ARG A	88	140.440	-1.210	-2.093	1.00	0.00
ATOM 1286	HA	ARG A	88	137.756	-0.077	-2.406	1.00	0.00
ATOM 1287	1HB	ARG A	88	138.597	-2.841	-2.972	1.00	0.00
ATOM 1288	2HB	ARG A	88	137.173	-2.705	-1.950	1.00	0.00
ATOM 1289	1HG	ARG A	88	137.176	-0.992	-4.340	1.00	0.00
ATOM 1290	2HG	ARG A	88	137.113	-2.730	-4.642	1.00	0.00
ATOM 1291	1HD	ARG A	88	135.230	-2.810	-2.946	1.00	0.00
ATOM 1292	2HD	ARG A	88	135.203	-1.050	-3.037	1.00	0.00
ATOM 1293	HE	ARG A	88	135.038	-1.938	-5.638	1.00	0.00
ATOM 1294	1HH1	ARG A	88	133.161	-2.310	-2.719	1.00	0.00
ATOM 1295	2HH1	ARG A	88	131.658	-2.491	-3.559	1.00	0.00
ATOM 1296	1HH2	ARG A	88	133.062	-2.176	-6.745	1.00	0.00
ATOM 1297	2HH2	ARG A	88	131.601	-2.416	-5.845	1.00	0.00
ATOM 1298	N	PRO A	89	137.224	-0.415	0.060	1.00	0.00
ATOM 1299	CA	PRO A	89	137.049	-0.428	1.516	1.00	0.00
ATOM 1300	C	PRO A	89	137.081	-1.842	2.089	1.00	0.00
ATOM 1301	O	PRO A	89	136.463	-2.756	1.545	1.00	0.00
ATOM 1302	CB	PRO A	89	135.666	0.197	1.720	1.00	0.00
ATOM 1303	CG	PRO A	89	135.435	1.020	0.501	1.00	0.00
ATOM 1304	CD	PRO A	89	136.128	0.299	-0.621	1.00	0.00
ATOM 1305	HA	PRO A	89	137.797	0.175	2.009	1.00	0.00
ATOM 1306	1HB	PRO A	89	134.926	-0.584	1.817	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.672	0.807	2.612	1.00	0.00
ATOM 1308	1HG	PRO A	89	134.376	1.093	0.303	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.862	2.003	0.634	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.452	-0.396	-1.098	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.516	1.005	-1.340	1.00	0.00
ATOM 1312	N	ASP A	90	137.806	-2.014	3.189	1.00	0.00

ATOM 1313	CA	ASP A	90	137.917	-3.316	3.835	1.00	0.00
ATOM 1314	C	ASP A	90	136.972	-3.412	5.029	1.00	0.00
ATOM 1315	O	ASP A	90	137.077	-2.637	5.980	1.00	0.00
ATOM 1316	CB	ASP A	90	139.356	-3.565	4.287	1.00	0.00
ATOM 1317	CG	ASP A	90	139.717	-5.038	4.282	1.00	0.00
ATOM 1318	OD1	ASP A	90	140.547	-5.448	5.120	1.00	0.00
ATOM 1319	OD2	ASP A	90	139.169	-5.780	3.441	1.00	0.00
ATOM 1320	H	ASP A	90	138.276	-1.246	3.577	1.00	0.00
ATOM 1321	HA	ASP A	90	137.640	-4.068	3.111	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.030	-3.047	3.622	1.00	0.00
ATOM 1323	2HB	ASP A	90	139.482	-3.185	5.290	1.00	0.00
ATOM 1324	N	SER A	91	136.050	-4.367	4.972	1.00	0.00
ATOM 1325	CA	SER A	91	135.087	-4.563	6.049	1.00	0.00
ATOM 1326	C	SER A	91	135.527	-5.694	6.974	1.00	0.00
ATOM 1327	O	SER A	91	134.698	-6.422	7.519	1.00	0.00
ATOM 1328	CB	SER A	91	133.703	-4.870	5.475	1.00	0.00
ATOM 1329	OG	SER A	91	132.679	-4.405	6.337	1.00	0.00
ATOM 1330	H	SER A	91	136.017	-4.954	4.188	1.00	0.00
ATOM 1331	HA	SER A	91	135.037	-3.649	6.618	1.00	0.00
ATOM 1332	1HB	SER A	91	133.597	-4.383	4.517	1.00	0.00
ATOM 1333	2HB	SER A	91	133.595	-5.937	5.350	1.00	0.00
ATOM 1334	HG	SER A	91	131.982	-5.063	6.390	1.00	0.00
ATOM 1335	N	ARG A	92	136.837	-5.835	7.146	1.00	0.00
ATOM 1336	CA	ARG A	92	137.387	-6.876	8.006	1.00	0.00
ATOM 1337	C	ARG A	92	137.020	-6.628	9.465	1.00	0.00
ATOM 1338	O	ARG A	92	136.878	-7.568	10.247	1.00	0.00
ATOM 1339	CB	ARG A	92	138.909	-6.940	7.854	1.00	0.00
ATOM 1340	CG	ARG A	92	139.365	-7.676	6.605	1.00	0.00
ATOM 1341	CD	ARG A	92	139.163	-9.177	6.737	1.00	0.00

ATOM 1342	NE	ARG A	92	137.960	-9.631	6.042	1.00	0.00
ATOM 1343	CZ	ARG A	92	137.717	-10.903	5.736	1.00	0.00
ATOM 1344	NH1	ARG A	92	138.590	-11.850	6.059	1.00	0.00
ATOM 1345	NH2	ARG A	92	136.599	-11.230	5.103	1.00	0.00
ATOM 1346	H	ARG A	92	137.449	-5.222	6.686	1.00	0.00
ATOM 1347	HA	ARG A	92	136.964	-7.819	7.695	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.298	-5.934	7.815	1.00	0.00
ATOM 1349	2HB	ARG A	92	139.324	-7.444	8.715	1.00	0.00
ATOM 1350	1HG	ARG A	92	138.794	-7.320	5.761	1.00	0.00
ATOM 1351	2HG	ARG A	92	140.414	-7.475	6.444	1.00	0.00
ATOM 1352	1HD	ARG A	92	140.021	-9.681	6.317	1.00	0.00
ATOM 1353	2HD	ARG A	92	139.078	-9.426	7.785	1.00	0.00
ATOM 1354	HE	ARG A	92	137.299	-8.953	5.792	1.00	0.00
ATOM 1355	1HH1	ARG A	92	139.436	-11.610	6.536	1.00	0.00
ATOM 1356	2HH1	ARG A	92	138.402	-12.804	5.826	1.00	0.00
ATOM 1357	1HH2	ARG A	92	135.937	-10.522	4.858	1.00	0.00
ATOM 1358	2HH2	ARG A	92	136.416	-12.187	4.873	1.00	0.00
ATOM 1359	N	PHE A	93	136.868	-5.358	9.825	1.00	0.00
ATOM 1360	CA	PHE A	93	136.517	-4.988	11.192	1.00	0.00
ATOM 1361	C	PHE A	93	135.373	-3.979	11.206	1.00	0.00
ATOM 1362	O	PHE A	93	135.331	-3.085	12.051	1.00	0.00
ATOM 1363	CB	PHE A	93	137.733	-4.406	11.914	1.00	0.00
ATOM 1364	CG	PHE A	93	138.849	-5.395	12.101	1.00	0.00
ATOM 1365	CD1	PHE A	93	139.524	-5.913	11.008	1.00	0.00
ATOM 1366	CD2	PHE A	93	139.223	-5.804	13.372	1.00	0.00
ATOM 1367	CE1	PHE A	93	140.552	-6.822	11.178	1.00	0.00
ATOM 1368	CE2	PHE A	93	140.248	-6.713	13.547	1.00	0.00
ATOM 1369	CZ	PHE A	93	140.913	-7.223	12.449	1.00	0.00
ATOM 1370	H	PHE A	93	136.994	-4.652	9.157	1.00	0.00

ATOM 1371	HA	PHE A	93	136.199	-5.882	11.705	1.00	0.00
ATOM 1372	1HB	PHE A	93	138.119	-3.576	11.342	1.00	0.00
ATOM 1373	2HB	PHE A	93	137.431	-4.056	12.889	1.00	0.00
ATOM 1374	HD1	PHE A	93	139.242	-5.600	10.014	1.00	0.00
ATOM 1375	HD2	PHE A	93	138.702	-5.407	14.231	1.00	0.00
ATOM 1376	HE1	PHE A	93	141.070	-7.219	10.317	1.00	0.00
ATOM 1377	HE2	PHE A	93	140.529	-7.025	14.542	1.00	0.00
ATOM 1378	HZ	PHE A	93	141.716	-7.934	12.584	1.00	0.00
ATOM 1379	N	ALA A	94	134.446	-4.128	10.266	1.00	0.00
ATOM 1380	CA	ALA A	94	133.302	-3.230	10.171	1.00	0.00
ATOM 1381	C	ALA A	94	132.101	-3.789	10.924	1.00	0.00
ATOM 1382	O	ALA A	94	131.718	-4.944	10.733	1.00	0.00
ATOM 1383	CB	ALA A	94	132.944	-2.982	8.713	1.00	0.00
ATOM 1384	H	ALA A	94	134.534	-4.860	9.620	1.00	0.00
ATOM 1385	HA	ALA A	94	133.583	-2.285	10.613	1.00	0.00
ATOM 1386	1HB	ALA A	94	132.185	-3.686	8.404	1.00	0.00
ATOM 1387	2HB	ALA A	94	133.824	-3.111	8.100	1.00	0.00
ATOM 1388	3HB	ALA A	94	132.570	-1.976	8.600	1.00	0.00
ATOM 1389	N	SER A	95	131.509	-2.964	11.783	1.00	0.00
ATOM 1390	CA	SER A	95	130.351	-3.376	12.566	1.00	0.00
ATOM 1391	C	SER A	95	129.056	-3.097	11.811	1.00	0.00
ATOM 1392	O	SER A	95	128.835	-1.988	11.325	1.00	0.00
ATOM 1393	CB	SER A	95	130.336	-2.652	13.913	1.00	0.00
ATOM 1394	OG	SER A	95	130.569	-1.263	13.749	1.00	0.00
ATOM 1395	H	SER A	95	131.861	-2.056	11.891	1.00	0.00
ATOM 1396	HA	SER A	95	130.430	-4.438	12.740	1.00	0.00
ATOM 1397	1HB	SER A	95	129.372	-2.788	14.382	1.00	0.00
ATOM 1398	2HB	SER A	95	131.107	-3.062	14.548	1.00	0.00
ATOM 1399	HG	SER A	95	129.901	-0.892	13.169	1.00	0.00

ATOM 1400	N	LEU A	96	128.201	-4.111	11.717	1.00	0.00
ATOM 1401	CA	LEU A	96	126.927	-3.976	11.022	1.00	0.00
ATOM 1402	C	LEU A	96	125.985	-5.119	11.386	1.00	0.00
ATOM 1403	O	LEU A	96	126.309	-6.290	11.190	1.00	0.00
ATOM 1404	CB	LEU A	96	127.150	-3.939	9.507	1.00	0.00
ATOM 1405	CG	LEU A	96	127.031	-2.553	8.870	1.00	0.00
ATOM 1406	CD1	LEU A	96	127.658	-2.548	7.484	1.00	0.00
ATOM 1407	CD2	LEU A	96	125.573	-2.123	8.800	1.00	0.00
ATOM 1408	H	LEU A	96	128.433	-4.971	12.126	1.00	0.00
ATOM 1409	HA	LEU A	96	126.478	-3.044	11.333	1.00	0.00
ATOM 1410	1HB	LEU A	96	128.137	-4.324	9.301	1.00	0.00
ATOM 1411	2HB	LEU A	96	126.424	-4.588	9.040	1.00	0.00
ATOM 1412	HG	LEU A	96	127.563	-1.837	9.479	1.00	0.00
ATOM 1413	1HD1	LEU A	96	127.346	-3.430	6.944	1.00	0.00
ATOM 1414	2HD1	LEU A	96	128.733	-2.544	7.576	1.00	0.00
ATOM 1415	3HD1	LEU A	96	127.339	-1.666	6.948	1.00	0.00
ATOM 1416	1HD2	LEU A	96	124.961	-2.970	8.524	1.00	0.00
ATOM 1417	2HD2	LEU A	96	125.463	-1.344	8.060	1.00	0.00
ATOM 1418	3HD2	LEU A	96	125.261	-1.752	9.764	1.00	0.00
ATOM 1419	N	GLN A	97	124.818	-4.770	11.919	1.00	0.00
ATOM 1420	CA	GLN A	97	123.829	-5.767	12.312	1.00	0.00
ATOM 1421	C	GLN A	97	122.418	-5.307	11.952	1.00	0.00
ATOM 1422	O	GLN A	97	121.781	-4.580	12.715	1.00	0.00
ATOM 1423	CB	GLN A	97	123.920	-6.040	13.814	1.00	0.00
ATOM 1424	CG	GLN A	97	124.007	-4.778	14.657	1.00	0.00
ATOM 1425	CD	GLN A	97	123.601	-5.011	16.100	1.00	0.00
ATOM 1426	OE1	GLN A	97	122.523	-4.598	16.527	1.00	0.00
ATOM 1427	NE2	GLN A	97	124.464	-5.675	16.858	1.00	0.00
ATOM 1428	H	GLN A	97	124.618	-3.821	12.052	1.00	0.00



ATOM 1429	HA	GLN A	97	124.047	-6.679	11.777	1.00	0.00
ATOM 1430	1HB	GLN A	97	123.045	-6.593	14.122	1.00	0.00
ATOM 1431	2HB	GLN A	97	124.798	-6.637	14.007	1.00	0.00
ATOM 1432	1HG	GLN A	97	125.024	-4.418	14.640	1.00	0.00
ATOM 1433	2HG	GLN A	97	123.354	-4.030	14.231	1.00	0.00
ATOM 1434	1HE2	GLN A	97	125.305	-5.974	16.450	1.00	0.00
ATOM 1435	2HE2	GLN A	97	124.228	-5.840	17.794	1.00	0.00
ATOM 1436	N	PRO A	98	121.906	-5.725	10.780	1.00	0.00
ATOM 1437	CA	PRO A	98	120.563	-5.349	10.327	1.00	0.00
ATOM 1438	C	PRO A	98	119.501	-5.591	11.395	1.00	0.00
ATOM 1439	O	PRO A	98	118.481	-4.905	11.436	1.00	0.00
ATOM 1440	CB	PRO A	98	120.328	-6.262	9.121	1.00	0.00
ATOM 1441	CG	PRO A	98	121.691	-6.560	8.604	1.00	0.00
ATOM 1442	CD	PRO A	98	122.594	-6.595	9.805	1.00	0.00
ATOM 1443	HA	PRO A	98	120.526	-4.315	10.012	1.00	0.00
ATOM 1444	1HB	PRO A	98	119.819	-7.160	9.441	1.00	0.00
ATOM 1445	2HB	PRO A	98	119.730	-5.745	8.386	1.00	0.00
ATOM 1446	1HG	PRO A	98	121.692	-7.519	8.105	1.00	0.00
ATOM 1447	2HG	PRO A	98	122.004	-5.782	7.922	1.00	0.00
ATOM 1448	1HD	PRO A	98	122.681	-7.602	10.184	1.00	0.00
ATOM 1449	2HD	PRO A	98	123.568	-6.199	9.557	1.00	0.00
ATOM 1450	N	SER A	99	119.751	-6.571	12.257	1.00	0.00
ATOM 1451	CA	SER A	99	118.818	-6.903	13.328	1.00	0.00
ATOM 1452	C	SER A	99	119.407	-6.553	14.690	1.00	0.00
ATOM 1453	O	SER A	99	120.557	-6.884	14.983	1.00	0.00
ATOM 1454	CB	SER A	99	118.462	-8.390	13.279	1.00	0.00
ATOM 1455	OG	SER A	99	118.677	-8.924	11.984	1.00	0.00
ATOM 1456	H	SER A	99	120.583	-7.081	12.174	1.00	0.00
ATOM 1457	HA	SER A	99	117.920	-6.322	13.178	1.00	0.00

ATOM 1458	1HB	SER A	99	119.079	-8.929	13.983	1.00	0.00
ATOM 1459	2HB	SER A	99	117.422	-8.518	13.540	1.00	0.00
ATOM 1460	HG	SER A	99	119.277	-9.671	12.041	1.00	0.00
ATOM 1461	N	GLY A	100	118.614	-5.885	15.520	1.00	0.00
ATOM 1462	CA	GLY A	100	119.076	-5.501	16.842	1.00	0.00
ATOM 1463	C	GLY A	100	118.068	-5.831	17.927	1.00	0.00
ATOM 1464	O	GLY A	100	116.862	-5.824	17.680	1.00	0.00
ATOM 1465	H	GLY A	100	117.707	-5.647	15.233	1.00	0.00
ATOM 1466	1HA	GLY A	100	119.999	-6.020	17.052	1.00	0.00
ATOM 1467	2HA	GLY A	100	119.262	-4.437	16.850	1.00	0.00
ATOM 1468	N	PRO A	101	118.536	-6.127	19.153	1.00	0.00
ATOM 1469	CA	PRO A	101	117.654	-6.460	20.276	1.00	0.00
ATOM 1470	C	PRO A	101	116.891	-5.245	20.792	1.00	0.00
ATOM 1471	O	PRO A	101	117.052	-4.840	21.944	1.00	0.00
ATOM 1472	CB	PRO A	101	118.620	-6.980	21.341	1.00	0.00
ATOM 1473	CG	PRO A	101	119.916	-6.311	21.034	1.00	0.00
ATOM 1474	CD	PRO A	101	119.960	-6.160	19.538	1.00	0.00
ATOM 1475	HA	PRO A	101	116.954	-7.238	20.010	1.00	0.00
ATOM 1476	1HB	PRO A	101	118.258	-6.710	22.322	1.00	0.00
ATOM 1477	2HB	PRO A	101	118.705	-8.054	21.263	1.00	0.00
ATOM 1478	1HG	PRO A	101	119.950	-5.343	21.511	1.00	0.00
ATOM 1479	2HG	PRO A	101	120.736	-6.926	21.373	1.00	0.00
ATOM 1480	1HD	PRO A	101	120.453	-5.238	19.267	1.00	0.00
ATOM 1481	2HD	PRO A	101	120.461	-7.003	19.088	1.00	0.00
ATOM 1482	N	SER A	102	116.057	-4.667	19.933	1.00	0.00
ATOM 1483	CA	SER A	102	115.268	-3.498	20.303	1.00	0.00
ATOM 1484	C	SER A	102	113.913	-3.913	20.867	1.00	0.00
ATOM 1485	O	SER A	102	113.606	-3.648	22.030	1.00	0.00
ATOM 1486	CB	SER A	102	115.071	-2.585	19.091	1.00	0.00

ATOM 1487 OG SER A 102 114.531 -1.334 19.478 1.00 0.00  
ATOM 1488 H SER A 102 115.971 -5.036 19.029 1.00 0.00  
ATOM 1489 HA SER A 102 115.812 -2.959 21.064 1.00 0.00  
ATOM 1490 1HB SER A 102 116.024 -2.418 18.611 1.00 0.00  
ATOM 1491 2HB SER A 102 114.394 -3.057 18.394 1.00 0.00  
ATOM 1492 HG SER A 102 115.179 -0.642 19.319 1.00 0.00  
ATOM 1493 N SER A 103 113.105 -4.563 20.036 1.00 0.00  
ATOM 1494 CA SER A 103 111.783 -5.015 20.452 1.00 0.00  
ATOM 1495 C SER A 103 111.266 -6.112 19.527 1.00 0.00  
ATOM 1496 O SER A 103 111.769 -6.290 18.418 1.00 0.00  
ATOM 1497 CB SER A 103 110.802 -3.840 20.466 1.00 0.00  
ATOM 1498 OG SER A 103 111.343 -2.733 21.164 1.00 0.00  
ATOM 1499 H SER A 103 113.407 -4.745 19.121 1.00 0.00  
ATOM 1500 HA SER A 103 111.868 -5.413 21.452 1.00 0.00  
ATOM 1501 1HB SER A 103 110.587 -3.541 19.452 1.00 0.00  
ATOM 1502 2HB SER A 103 109.887 -4.146 20.952 1.00 0.00  
ATOM 1503 HG SER A 103 111.681 -3.022 22.014 1.00 0.00  
ATOM 1504 N GLY A 104 110.261 -6.846 19.992 1.00 0.00  
ATOM 1505 CA GLY A 104 109.694 -7.916 19.194 1.00 0.00  
ATOM 1506 C GLY A 104 108.344 -8.374 19.712 1.00 0.00  
ATOM 1507 O GLY A 104 108.159 -9.597 19.890 1.00 0.00  
ATOM 1508 OXT GLY A 104 107.472 -7.510 19.941 1.00 0.00  
ATOM 1509 H GLY A 104 109.901 -6.658 20.885 1.00 0.00  
ATOM 1510 1HA GLY A 104 109.578 -7.571 18.178 1.00 0.00  
ATOM 1511 2HA GLY A 104 110.373 -8.756 19.203 1.00 0.00  
TER 1512 GLY A 104  
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## 立体構造座標表 6

ATOM 1	N	GLY A	1	112.318	9.750	-2.270	1.00	0.00
ATOM 2	CA	GLY A	1	111.240	9.201	-3.139	1.00	0.00
ATOM 3	C	GLY A	1	110.691	7.886	-2.623	1.00	0.00
ATOM 4	O	GLY A	1	109.480	7.663	-2.635	1.00	0.00
ATOM 5	1H	GLY A	1	113.178	9.172	-2.358	1.00	0.00
ATOM 6	2H	GLY A	1	112.012	9.746	-1.276	1.00	0.00
ATOM 7	3H	GLY A	1	112.539	10.727	-2.549	1.00	0.00
ATOM 8	1HA	GLY A	1	110.435	9.918	-3.192	1.00	0.00
ATOM 9	2HA	GLY A	1	111.637	9.047	-4.132	1.00	0.00
ATOM 10	N	SER A	2	111.584	7.013	-2.167	1.00	0.00
ATOM 11	CA	SER A	2	111.182	5.712	-1.643	1.00	0.00
ATOM 12	C	SER A	2	112.008	5.342	-0.415	1.00	0.00
ATOM 13	O	SER A	2	111.463	4.944	0.615	1.00	0.00
ATOM 14	CB	SER A	2	111.337	4.636	-2.718	1.00	0.00
ATOM 15	OG	SER A	2	110.409	4.831	-3.772	1.00	0.00
ATOM 16	H	SER A	2	112.534	7.249	-2.182	1.00	0.00
ATOM 17	HA	SER A	2	110.143	5.776	-1.357	1.00	0.00
ATOM 18	1HB	SER A	2	112.337	4.677	-3.125	1.00	0.00
ATOM 19	2HB	SER A	2	111.166	3.664	-2.280	1.00	0.00
ATOM 20	HG	SER A	2	109.545	5.031	-3.405	1.00	0.00
ATOM 21	N	SER A	3	113.325	5.477	-0.531	1.00	0.00
ATOM 22	CA	SER A	3	114.226	5.157	0.571	1.00	0.00
ATOM 23	C	SER A	3	114.354	6.336	1.530	1.00	0.00
ATOM 24	O	SER A	3	114.036	6.223	2.713	1.00	0.00
ATOM 25	CB	SER A	3	115.604	4.770	0.033	1.00	0.00
ATOM 26	OG	SER A	3	116.188	5.838	-0.692	1.00	0.00
ATOM 27	H	SER A	3	113.700	5.799	-1.377	1.00	0.00
ATOM 28	HA	SER A	3	113.809	4.316	1.105	1.00	0.00

ATOM 29	1HB	SER A	3	116.252	4.515	0.859	1.00	0.00
ATOM 30	2HB	SER A	3	115.506	3.917	-0.623	1.00	0.00
ATOM 31	HG	SER A	3	117.117	5.913	-0.460	1.00	0.00
ATOM 32	N	GLY A	4	114.820	7.466	1.009	1.00	0.00
ATOM 33	CA	GLY A	4	114.983	8.649	1.833	1.00	0.00
ATOM 34	C	GLY A	4	116.174	8.550	2.765	1.00	0.00
ATOM 35	O	GLY A	4	116.069	8.004	3.863	1.00	0.00
ATOM 36	H	GLY A	4	115.058	7.497	0.060	1.00	0.00
ATOM 37	1HA	GLY A	4	115.113	9.507	1.190	1.00	0.00
ATOM 38	2HA	GLY A	4	114.089	8.787	2.424	1.00	0.00
ATOM 39	N	SER A	5	117.312	9.078	2.326	1.00	0.00
ATOM 40	CA	SER A	5	118.529	9.046	3.127	1.00	0.00
ATOM 41	C	SER A	5	119.241	10.395	3.092	1.00	0.00
ATOM 42	O	SER A	5	119.252	11.074	2.066	1.00	0.00
ATOM 43	CB	SER A	5	119.468	7.948	2.623	1.00	0.00
ATOM 44	OG	SER A	5	119.748	8.109	1.244	1.00	0.00
ATOM 45	H	SER A	5	117.334	9.500	1.441	1.00	0.00
ATOM 46	HA	SER A	5	118.249	8.827	4.147	1.00	0.00
ATOM 47	1HB	SER A	5	120.397	7.991	3.173	1.00	0.00
ATOM 48	2HB	SER A	5	119.006	6.984	2.774	1.00	0.00
ATOM 49	HG	SER A	5	120.660	7.865	1.070	1.00	0.00
ATOM 50	N	SER A	6	119.832	10.776	4.219	1.00	0.00
ATOM 51	CA	SER A	6	120.546	12.044	4.317	1.00	0.00
ATOM 52	C	SER A	6	121.965	11.832	4.834	1.00	0.00
ATOM 53	O	SER A	6	122.531	12.701	5.498	1.00	0.00
ATOM 54	CB	SER A	6	119.794	13.006	5.238	1.00	0.00
ATOM 55	OG	SER A	6	118.457	13.187	4.805	1.00	0.00
ATOM 56	H	SER A	6	119.789	10.190	5.003	1.00	0.00
ATOM 57	HA	SER A	6	120.597	12.473	3.327	1.00	0.00

ATOM 58	IHB	SER A	6	119.782	12.606	6.240	1.00	0.00
ATOM 59	2HB	SER A	6	120.292	13.964	5.238	1.00	0.00
ATOM 60	HG	SER A	6	118.443	13.319	3.854	1.00	0.00
ATOM 61	N	GLY A	7	122.535	10.671	4.527	1.00	0.00
ATOM 62	CA	GLY A	7	123.883	10.367	4.969	1.00	0.00
ATOM 63	C	GLY A	7	124.017	8.950	5.488	1.00	0.00
ATOM 64	O	GLY A	7	123.400	8.587	6.490	1.00	0.00
ATOM 65	H	GLY A	7	122.036	10.016	3.995	1.00	0.00
ATOM 66	1HA	GLY A	7	124.561	10.500	4.139	1.00	0.00
ATOM 67	2HA	GLY A	7	124.155	11.054	5.756	1.00	0.00
ATOM 68	N	LEU A	8	124.825	8.144	4.805	1.00	0.00
ATOM 69	CA	LEU A	8	125.038	6.758	5.203	1.00	0.00
ATOM 70	C	LEU A	8	126.306	6.621	6.038	1.00	0.00
ATOM 71	O	LEU A	8	126.247	6.510	7.263	1.00	0.00
ATOM 72	CB	LEU A	8	125.123	5.858	3.969	1.00	0.00
ATOM 73	CG	LEU A	8	123.782	5.319	3.467	1.00	0.00
ATOM 74	CD1	LEU A	8	123.953	4.629	2.123	1.00	0.00
ATOM 75	CD2	LEU A	8	123.178	4.364	4.486	1.00	0.00
ATOM 76	H	LEU A	8	125.289	8.492	4.014	1.00	0.00
ATOM 77	HA	LEU A	8	124.196	6.453	5.801	1.00	0.00
ATOM 78	1HB	LEU A	8	125.583	6.421	3.169	1.00	0.00
ATOM 79	2HB	LEU A	8	125.757	5.017	4.205	1.00	0.00
ATOM 80	HG	LEU A	8	123.097	6.144	3.333	1.00	0.00
ATOM 81	1HD1	LEU A	8	123.170	3.896	1.992	1.00	0.00
ATOM 82	2HD1	LEU A	8	124.915	4.140	2.089	1.00	0.00
ATOM 83	3HD1	LEU A	8	123.893	5.362	1.331	1.00	0.00
ATOM 84	1HD2	LEU A	8	123.006	4.890	5.414	1.00	0.00
ATOM 85	2HD2	LEU A	8	123.859	3.544	4.658	1.00	0.00
ATOM 86	3HD2	LEU A	8	122.241	3.982	4.110	1.00	0.00

ATOM 87	N	ALA A	9	127.450	6.628	5.367	1.00	0.00
ATOM 88	CA	ALA A	9	128.735	6.505	6.044	1.00	0.00
ATOM 89	C	ALA A	9	129.891	6.773	5.085	1.00	0.00
ATOM 90	O	ALA A	9	130.601	5.854	4.679	1.00	0.00
ATOM 91	CB	ALA A	9	128.872	5.123	6.665	1.00	0.00
ATOM 92	H	ALA A	9	127.429	6.720	4.392	1.00	0.00
ATOM 93	HA	ALA A	9	128.764	7.235	6.839	1.00	0.00
ATOM 94	1HB	ALA A	9	127.891	4.724	6.876	1.00	0.00
ATOM 95	2HB	ALA A	9	129.436	5.195	7.583	1.00	0.00
ATOM 96	3HB	ALA A	9	129.387	4.468	5.978	1.00	0.00
ATOM 97	N	MET A	10	130.074	8.041	4.727	1.00	0.00
ATOM 98	CA	MET A	10	131.144	8.429	3.816	1.00	0.00
ATOM 99	C	MET A	10	131.191	9.946	3.646	1.00	0.00
ATOM 100	O	MET A	10	130.954	10.465	2.554	1.00	0.00
ATOM 101	CB	MET A	10	130.955	7.754	2.457	1.00	0.00
ATOM 102	CG	MET A	10	129.539	7.863	1.913	1.00	0.00
ATOM 103	SD	MET A	10	129.407	9.023	0.539	1.00	0.00
ATOM 104	CE	MET A	10	129.163	7.897	-0.833	1.00	0.00
ATOM 105	H	MET A	10	129.476	8.729	5.084	1.00	0.00
ATOM 106	HA	MET A	10	132.078	8.099	4.245	1.00	0.00
ATOM 107	1HB	MET A	10	131.628	8.210	1.746	1.00	0.00
ATOM 108	2HB	MET A	10	131.202	6.707	2.551	1.00	0.00
ATOM 109	1HG	MET A	10	129.223	6.888	1.573	1.00	0.00
ATOM 110	2HG	MET A	10	128.887	8.193	2.709	1.00	0.00
ATOM 111	1HE	MET A	10	130.124	7.587	-1.218	1.00	0.00
ATOM 112	2HE	MET A	10	128.607	8.395	-1.613	1.00	0.00
ATOM 113	3HE	MET A	10	128.615	7.031	-0.494	1.00	0.00
ATOM 114	N	PRO A	11	131.502	10.682	4.727	1.00	0.00
ATOM 115	CA	PRO A	11	131.579	12.145	4.688	1.00	0.00

ATOM 116	C	PRO A	11	132.593	12.645	3.660	1.00	0.00
ATOM 117	O	PRO A	11	132.293	13.544	2.875	1.00	0.00
ATOM 118	CB	PRO A	11	132.019	12.534	6.104	1.00	0.00
ATOM 119	CG	PRO A	11	131.698	11.352	6.955	1.00	0.00
ATOM 120	CD	PRO A	11	131.801	10.145	6.065	1.00	0.00
ATOM 121	HA	PRO A	11	130.615	12.582	4.476	1.00	0.00
ATOM 122	1HB	PRO A	11	133.076	12.749	6.109	1.00	0.00
ATOM 123	2HB	PRO A	11	131.469	13.407	6.424	1.00	0.00
ATOM 124	1HG	PRO A	11	132.411	11.280	7.761	1.00	0.00
ATOM 125	2HG	PRO A	11	130.696	11.444	7.348	1.00	0.00
ATOM 126	1HD	PRO A	11	132.798	9.733	6.102	1.00	0.00
ATOM 127	2HD	PRO A	11	131.072	9.402	6.353	1.00	0.00
ATOM 128	N	PRO A	12	133.809	12.066	3.642	1.00	0.00
ATOM 129	CA	PRO A	12	134.853	12.465	2.692	1.00	0.00
ATOM 130	C	PRO A	12	134.377	12.375	1.247	1.00	0.00
ATOM 131	O	PRO A	12	134.926	13.028	0.359	1.00	0.00
ATOM 132	CB	PRO A	12	135.981	11.461	2.945	1.00	0.00
ATOM 133	CG	PRO A	12	135.751	10.969	4.331	1.00	0.00
ATOM 134	CD	PRO A	12	134.262	10.980	4.532	1.00	0.00
ATOM 135	HA	PRO A	12	135.206	13.467	2.892	1.00	0.00
ATOM 136	1HB	PRO A	12	135.918	10.658	2.225	1.00	0.00
ATOM 137	2HB	PRO A	12	136.935	11.957	2.856	1.00	0.00
ATOM 138	1HG	PRO A	12	136.135	9.965	4.434	1.00	0.00
ATOM 139	2HG	PRO A	12	136.229	11.629	5.040	1.00	0.00
ATOM 140	1HD	PRO A	12	133.834	10.034	4.236	1.00	0.00
ATOM 141	2HD	PRO A	12	134.023	11.198	5.561	1.00	0.00
ATOM 142	N	GLY A	13	133.351	11.559	1.017	1.00	0.00
ATOM 143	CA	GLY A	13	132.818	11.397	-0.322	1.00	0.00
ATOM 144	C	GLY A	13	133.068	10.012	-0.886	1.00	0.00



ATOM 145	O	GLY A	13	132.330	9.545	-1.754	1.00	0.00
ATOM 146	H	GLY A	13	132.954	11.064	1.765	1.00	0.00
ATOM 147	1HA	GLY A	13	131.753	11.577	-0.298	1.00	0.00
ATOM 148	2HA	GLY A	13	133.278	12.127	-0.972	1.00	0.00
ATOM 149	N	ASN A	14	134.112	9.353	-0.393	1.00	0.00
ATOM 150	CA	ASN A	14	134.459	8.014	-0.854	1.00	0.00
ATOM 151	C	ASN A	14	133.299	7.045	-0.640	1.00	0.00
ATOM 152	O	ASN A	14	132.195	7.453	-0.284	1.00	0.00
ATOM 153	CB	ASN A	14	135.703	7.506	-0.122	1.00	0.00
ATOM 154	CG	ASN A	14	136.823	8.529	-0.108	1.00	0.00
ATOM 155	OD1	ASN A	14	136.609	9.697	0.216	1.00	0.00
ATOM 156	ND2	ASN A	14	138.026	8.093	-0.460	1.00	0.00
ATOM 157	H	ASN A	14	134.664	9.778	0.297	1.00	0.00
ATOM 158	HA	ASN A	14	134.672	8.072	-1.911	1.00	0.00
ATOM 159	1HB	ASN A	14	135.442	7.272	0.899	1.00	0.00
ATOM 160	2HB	ASN A	14	136.062	6.613	-0.612	1.00	0.00
ATOM 161	1HD2	ASN A	14	138.123	7.149	-0.706	1.00	0.00
ATOM 162	2HD2	ASN A	14	138.769	8.733	-0.460	1.00	0.00
ATOM 163	N	SER A	15	133.559	5.761	-0.861	1.00	0.00
ATOM 164	CA	SER A	15	132.538	4.734	-0.693	1.00	0.00
ATOM 165	C	SER A	15	132.234	4.506	0.785	1.00	0.00
ATOM 166	O	SER A	15	131.163	4.867	1.271	1.00	0.00
ATOM 167	CB	SER A	15	132.989	3.423	-1.341	1.00	0.00
ATOM 168	OG	SER A	15	132.025	2.403	-1.154	1.00	0.00
ATOM 169	H	SER A	15	134.460	5.496	-1.144	1.00	0.00
ATOM 170	HA	SER A	15	131.639	5.077	-1.184	1.00	0.00
ATOM 171	1HB	SER A	15	133.130	3.578	-2.400	1.00	0.00
ATOM 172	2HB	SER A	15	133.921	3.108	-0.896	1.00	0.00
ATOM 173	HG	SER A	15	132.121	2.027	-0.276	1.00	0.00

ATOM 174	N	HIS A	16	133.184	3.902	1.492	1.00	0.00
ATOM 175	CA	HIS A	16	133.019	3.626	2.914	1.00	0.00
ATOM 176	C	HIS A	16	133.864	4.578	3.754	1.00	0.00
ATOM 177	O	HIS A	16	133.441	5.026	4.820	1.00	0.00
ATOM 178	CB	HIS A	16	133.401	2.176	3.221	1.00	0.00
ATOM 179	CG	HIS A	16	132.222	1.262	3.354	1.00	0.00
ATOM 180	ND1	HIS A	16	131.448	1.193	4.493	1.00	0.00
ATOM 181	CD2	HIS A	16	131.686	0.375	2.482	1.00	0.00
ATOM 182	CE1	HIS A	16	130.487	0.303	4.316	1.00	0.00
ATOM 183	NE2	HIS A	16	130.610	-0.207	3.104	1.00	0.00
ATOM 184	H	HIS A	16	134.016	3.638	1.047	1.00	0.00
ATOM 185	HA	HIS A	16	131.978	3.775	3.162	1.00	0.00
ATOM 186	1HB	HIS A	16	134.024	1.800	2.424	1.00	0.00
ATOM 187	2HB	HIS A	16	133.953	2.144	4.149	1.00	0.00
ATOM 188	HD1	HIS A	16	131.582	1.718	5.309	1.00	0.00
ATOM 189	HD2	HIS A	16	132.040	0.165	1.482	1.00	0.00
ATOM 190	HE1	HIS A	16	129.730	0.038	5.039	1.00	0.00
ATOM 191	HE2	HIS A	16	129.981	-0.833	2.688	1.00	0.00
ATOM 192	N	GLY A	17	135.063	4.882	3.267	1.00	0.00
ATOM 193	CA	GLY A	17	135.949	5.778	3.985	1.00	0.00
ATOM 194	C	GLY A	17	137.401	5.349	3.901	1.00	0.00
ATOM 195	O	GLY A	17	138.064	5.173	4.923	1.00	0.00
ATOM 196	H	GLY A	17	135.348	4.495	2.413	1.00	0.00
ATOM 197	1HA	GLY A	17	135.854	6.771	3.570	1.00	0.00
ATOM 198	2HA	GLY A	17	135.654	5.805	5.024	1.00	0.00
ATOM 199	N	LEU A	18	137.897	5.182	2.678	1.00	0.00
ATOM 200	CA	LEU A	18	139.279	4.771	2.465	1.00	0.00
ATOM 201	C	LEU A	18	140.246	5.872	2.888	1.00	0.00
ATOM 202	O	LEU A	18	140.497	6.814	2.136	1.00	0.00

ATOM 203	CB	LEU A	18	139.506	4.415	0.994	1.00	0.00
ATOM 204	CG	LEU A	18	138.484	3.445	0.398	1.00	0.00
ATOM 205	CD1	LEU A	18	138.481	3.540	-1.120	1.00	0.00
ATOM 206	CD2	LEU A	18	138.781	2.021	0.844	1.00	0.00
ATOM 207	H	LEU A	18	137.318	5.338	1.903	1.00	0.00
ATOM 208	HA	LEU A	18	139.462	3.895	3.070	1.00	0.00
ATOM 209	1HB	LEU A	18	139.484	5.328	0.417	1.00	0.00
ATOM 210	2HB	LEU A	18	140.486	3.972	0.900	1.00	0.00
ATOM 211	HG	LEU A	18	137.498	3.709	0.751	1.00	0.00
ATOM 212	1HD1	LEU A	18	138.860	4.506	-1.421	1.00	0.00
ATOM 213	2HD1	LEU A	18	137.472	3.419	-1.485	1.00	0.00
ATOM 214	3HD1	LEU A	18	139.109	2.763	-1.530	1.00	0.00
ATOM 215	1HD2	LEU A	18	139.591	1.619	0.254	1.00	0.00
ATOM 216	2HD2	LEU A	18	137.899	1.411	0.709	1.00	0.00
ATOM 217	3HD2	LEU A	18	139.061	2.021	1.887	1.00	0.00
ATOM 218	N	GLU A	19	140.783	5.748	4.096	1.00	0.00
ATOM 219	CA	GLU A	19	141.722	6.733	4.621	1.00	0.00
ATOM 220	C	GLU A	19	142.809	6.061	5.452	1.00	0.00
ATOM 221	O	GLU A	19	142.810	4.843	5.622	1.00	0.00
ATOM 222	CB	GLU A	19	140.984	7.772	5.467	1.00	0.00
ATOM 223	CG	GLU A	19	140.233	7.174	6.645	1.00	0.00
ATOM 224	CD	GLU A	19	139.754	8.226	7.625	1.00	0.00
ATOM 225	OE1	GLU A	19	140.533	9.155	7.928	1.00	0.00
ATOM 226	OE2	GLU A	19	138.599	8.123	8.091	1.00	0.00
ATOM 227	H	GLU A	19	140.544	4.976	4.650	1.00	0.00
ATOM 228	HA	GLU A	19	142.184	7.230	3.779	1.00	0.00
ATOM 229	1HB	GLU A	19	141.702	8.483	5.849	1.00	0.00
ATOM 230	2HB	GLU A	19	140.274	8.291	4.841	1.00	0.00
ATOM 231	1HG	GLU A	19	139.375	6.635	6.272	1.00	0.00

ATOM 232	2HG	GLU A	19	140.888	6.490	7.164	1.00	0.00
ATOM 233	N	VAL A	20	143.732	6.865	5.969	1.00	0.00
ATOM 234	CA	VAL A	20	144.825	6.349	6.785	1.00	0.00
ATOM 235	C	VAL A	20	144.297	5.620	8.015	1.00	0.00
ATOM 236	O	VAL A	20	143.530	6.181	8.799	1.00	0.00
ATOM 237	CB	VAL A	20	145.770	7.479	7.235	1.00	0.00
ATOM 238	CG1	VAL A	20	146.993	6.908	7.939	1.00	0.00
ATOM 239	CG2	VAL A	20	146.181	8.337	6.049	1.00	0.00
ATOM 240	H	VAL A	20	143.678	7.829	5.798	1.00	0.00
ATOM 241	HA	VAL A	20	145.391	5.654	6.182	1.00	0.00
ATOM 242	HB	VAL A	20	145.240	8.105	7.938	1.00	0.00
ATOM 243	1HG1	VAL A	20	146.795	6.830	8.997	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.838	7.559	7.777	1.00	0.00
ATOM 245	3HG1	VAL A	20	147.211	5.928	7.540	1.00	0.00
ATOM 246	1HG2	VAL A	20	145.398	9.046	5.828	1.00	0.00
ATOM 247	2HG2	VAL A	20	146.348	7.705	5.189	1.00	0.00
ATOM 248	3HG2	VAL A	20	147.091	8.868	6.287	1.00	0.00
ATOM 249	N	GLY A	21	144.711	4.369	8.179	1.00	0.00
ATOM 250	CA	GLY A	21	144.269	3.583	9.316	1.00	0.00
ATOM 251	C	GLY A	21	143.228	2.548	8.939	1.00	0.00
ATOM 252	O	GLY A	21	143.210	1.447	9.489	1.00	0.00
ATOM 253	H	GLY A	21	145.322	3.975	7.522	1.00	0.00
ATOM 254	1HA	GLY A	21	145.123	3.080	9.745	1.00	0.00
ATOM 255	2HA	GLY A	21	143.847	4.248	10.056	1.00	0.00
ATOM 256	N	SER A	22	142.359	2.901	7.997	1.00	0.00
ATOM 257	CA	SER A	22	141.310	1.995	7.546	1.00	0.00
ATOM 258	C	SER A	22	141.877	0.922	6.622	1.00	0.00
ATOM 259	O	SER A	22	142.764	1.192	5.812	1.00	0.00
ATOM 260	CB	SER A	22	140.208	2.774	6.826	1.00	0.00

ATOM 261	OG	SER A	22	139.268	3.299	7.747	1.00	0.00
ATOM 262	H	SER A	22	142.425	3.793	7.596	1.00	0.00
ATOM 263	HA	SER A	22	140.889	1.516	8.417	1.00	0.00
ATOM 264	1HB	SER A	22	140.649	3.592	6.276	1.00	0.00
ATOM 265	2HB	SER A	22	139.694	2.116	6.141	1.00	0.00
ATOM 266	HG	SER A	22	138.475	3.569	7.277	1.00	0.00
ATOM 267	N	LEU A	23	141.359	-0.295	6.749	1.00	0.00
ATOM 268	CA	LEU A	23	141.815	-1.410	5.924	1.00	0.00
ATOM 269	C	LEU A	23	141.296	-1.278	4.496	1.00	0.00
ATOM 270	O	LEU A	23	140.234	-0.702	4.261	1.00	0.00
ATOM 271	CB	LEU A	23	141.353	-2.738	6.526	1.00	0.00
ATOM 272	CG	LEU A	23	141.931	-3.059	7.905	1.00	0.00
ATOM 273	CD1	LEU A	23	140.954	-3.903	8.709	1.00	0.00
ATOM 274	CD2	LEU A	23	143.268	-3.773	7.769	1.00	0.00
ATOM 275	H	LEU A	23	140.655	-0.449	7.412	1.00	0.00
ATOM 276	HA	LEU A	23	142.894	-1.388	5.907	1.00	0.00
ATOM 277	1HB	LEU A	23	140.276	-2.718	6.605	1.00	0.00
ATOM 278	2HB	LEU A	23	141.633	-3.531	5.850	1.00	0.00
ATOM 279	HG	LEU A	23	142.096	-2.137	8.443	1.00	0.00
ATOM 280	1HD1	LEU A	23	140.921	-4.902	8.302	1.00	0.00
ATOM 281	2HD1	LEU A	23	139.970	-3.460	8.659	1.00	0.00
ATOM 282	3HD1	LEU A	23	141.277	-3.944	9.739	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.908	-3.500	8.594	1.00	0.00
ATOM 284	2HD2	LEU A	23	143.736	-3.485	6.840	1.00	0.00
ATOM 285	3HD2	LEU A	23	143.107	-4.841	7.776	1.00	0.00
ATOM 286	N	ALA A	24	142.055	-1.814	3.546	1.00	0.00
ATOM 287	CA	ALA A	24	141.672	-1.757	2.140	1.00	0.00
ATOM 288	C	ALA A	24	142.245	-2.941	1.367	1.00	0.00
ATOM 289	O	ALA A	24	143.206	-3.573	1.804	1.00	0.00

ATOM 290	CB	ALA A	24	142.135	-0.447	1.520	1.00	0.00
ATOM 291	H	ALA A	24	142.890	-2.260	3.795	1.00	0.00
ATOM 292	HA	ALA A	24	140.593	-1.793	2.086	1.00	0.00
ATOM 293	1HB	ALA A	24	143.026	-0.105	2.025	1.00	0.00
ATOM 294	2HB	ALA A	24	141.356	0.295	1.623	1.00	0.00
ATOM 295	3HB	ALA A	24	142.350	-0.601	0.473	1.00	0.00
ATOM 296	N	GLU A	25	141.647	-3.236	0.217	1.00	0.00
ATOM 297	CA	GLU A	25	142.098	-4.344	-0.617	1.00	0.00
ATOM 298	C	GLU A	25	142.441	-3.863	-2.023	1.00	0.00
ATOM 299	O	GLU A	25	141.810	-2.945	-2.547	1.00	0.00
ATOM 300	CB	GLU A	25	141.023	-5.430	-0.684	1.00	0.00
ATOM 301	CG	GLU A	25	141.523	-6.747	-1.252	1.00	0.00
ATOM 302	CD	GLU A	25	140.399	-7.623	-1.770	1.00	0.00
ATOM 303	OE1	GLU A	25	140.407	-7.947	-2.976	1.00	0.00
ATOM 304	OE2	GLU A	25	139.511	-7.986	-0.970	1.00	0.00
ATOM 305	H	GLU A	25	140.885	-2.695	-0.079	1.00	0.00
ATOM 306	HA	GLU A	25	142.987	-4.758	-0.164	1.00	0.00
ATOM 307	1HB	GLU A	25	140.646	-5.611	0.311	1.00	0.00
ATOM 308	2HB	GLU A	25	140.212	-5.078	-1.306	1.00	0.00
ATOM 309	1HG	GLU A	25	142.200	-6.540	-2.066	1.00	0.00
ATOM 310	2HG	GLU A	25	142.048	-7.283	-0.475	1.00	0.00
ATOM 311	N	VAL A	26	143.445	-4.489	-2.629	1.00	0.00
ATOM 312	CA	VAL A	26	143.872	-4.124	-3.974	1.00	0.00
ATOM 313	C	VAL A	26	143.444	-5.178	-4.990	1.00	0.00
ATOM 314	O	VAL A	26	143.415	-6.370	-4.688	1.00	0.00
ATOM 315	CB	VAL A	26	145.399	-3.944	-4.051	1.00	0.00
ATOM 316	CG1	VAL A	26	145.804	-3.375	-5.401	1.00	0.00
ATOM 317	CG2	VAL A	26	145.890	-3.054	-2.919	1.00	0.00
ATOM 318	H	VAL A	26	143.910	-5.212	-2.160	1.00	0.00

ATOM 319	HA	VAL A	26	143.406	-3.183	-4.229	1.00	0.00
ATOM 320	HB	VAL A	26	145.861	-4.915	-3.942	1.00	0.00
ATOM 321	1HG1	VAL A	26	146.882	-3.336	-5.467	1.00	0.00
ATOM 322	2HG1	VAL A	26	145.401	-2.378	-5.506	1.00	0.00
ATOM 323	3HG1	VAL A	26	145.418	-4.005	-6.188	1.00	0.00
ATOM 324	1HG2	VAL A	26	145.976	-3.637	-2.013	1.00	0.00
ATOM 325	2HG2	VAL A	26	145.186	-2.250	-2.763	1.00	0.00
ATOM 326	3HG2	VAL A	26	146.855	-2.643	-3.175	1.00	0.00
ATOM 327	N	LYS A	27	143.116	-4.729	-6.197	1.00	0.00
ATOM 328	CA	LYS A	27	142.690	-5.633	-7.259	1.00	0.00
ATOM 329	C	LYS A	27	143.880	-6.082	-8.101	1.00	0.00
ATOM 330	O	LYS A	27	144.102	-5.577	-9.201	1.00	0.00
ATOM 331	CB	LYS A	27	141.647	-4.954	-8.149	1.00	0.00
ATOM 332	CG	LYS A	27	140.301	-4.761	-7.470	1.00	0.00
ATOM 333	CD	LYS A	27	139.285	-5.786	-7.945	1.00	0.00
ATOM 334	CE	LYS A	27	139.368	-7.071	-7.135	1.00	0.00
ATOM 335	NZ	LYS A	27	138.350	-7.109	-6.048	1.00	0.00
ATOM 336	H	LYS A	27	143.160	-3.766	-6.378	1.00	0.00
ATOM 337	HA	LYS A	27	142.245	-6.501	-6.796	1.00	0.00
ATOM 338	1HB	LYS A	27	142.021	-3.983	-8.443	1.00	0.00
ATOM 339	2HB	LYS A	27	141.499	-5.556	-9.034	1.00	0.00
ATOM 340	1HG	LYS A	27	140.429	-4.864	-6.403	1.00	0.00
ATOM 341	2HG	LYS A	27	139.933	-3.771	-7.698	1.00	0.00
ATOM 342	1HD	LYS A	27	138.293	-5.372	-7.841	1.00	0.00
ATOM 343	2HD	LYS A	27	139.475	-6.014	-8.984	1.00	0.00
ATOM 344	1HE	LYS A	27	139.208	-7.909	-7.795	1.00	0.00
ATOM 345	2HE	LYS A	27	140.353	-7.141	-6.697	1.00	0.00
ATOM 346	1HZ	LYS A	27	137.554	-6.482	-6.282	1.00	0.00
ATOM 347	2HZ	LYS A	27	138.772	-6.795	-5.152	1.00	0.00

ATOM 348	3HZ	LYS A	27	137.992	-8.078	-5.928	1.00	0.00
ATOM 349	N	GLU A	28	144.644	-7.034	-7.575	1.00	0.00
ATOM 350	CA	GLU A	28	145.812	-7.553	-8.278	1.00	0.00
ATOM 351	C	GLU A	28	145.714	-9.064	-8.456	1.00	0.00
ATOM 352	O	GLU A	28	144.671	-9.664	-8.195	1.00	0.00
ATOM 353	CB	GLU A	28	147.091	-7.198	-7.514	1.00	0.00
ATOM 354	CG	GLU A	28	148.178	-6.601	-8.394	1.00	0.00
ATOM 355	CD	GLU A	28	149.554	-7.148	-8.072	1.00	0.00
ATOM 356	OE1	GLU A	28	150.418	-7.154	-8.976	1.00	0.00
ATOM 357	OE2	GLU A	28	149.770	-7.572	-6.918	1.00	0.00
ATOM 358	H	GLU A	28	144.417	-7.397	-6.694	1.00	0.00
ATOM 359	HA	GLU A	28	145.846	-7.088	-9.252	1.00	0.00
ATOM 360	1HB	GLU A	28	146.849	-6.482	-6.743	1.00	0.00
ATOM 361	2HB	GLU A	28	147.483	-8.092	-7.052	1.00	0.00
ATOM 362	1HG	GLU A	28	147.952	-6.824	-9.426	1.00	0.00
ATOM 363	2HG	GLU A	28	148.190	-5.530	-8.252	1.00	0.00
ATOM 364	N	ASN A	29	146.807	-9.675	-8.902	1.00	0.00
ATOM 365	CA	ASN A	29	146.843	-11.117	-9.113	1.00	0.00
ATOM 366	C	ASN A	29	146.916	-11.858	-7.781	1.00	0.00
ATOM 367	O	ASN A	29	146.049	-12.673	-7.467	1.00	0.00
ATOM 368	CB	ASN A	29	148.038	-11.495	-9.992	1.00	0.00
ATOM 369	CG	ASN A	29	147.648	-11.689	-11.445	1.00	0.00
ATOM 370	OD1	ASN A	29	147.487	-12.817	-11.911	1.00	0.00
ATOM 371	ND2	ASN A	29	147.495	-10.586	-12.168	1.00	0.00
ATOM 372	H	ASN A	29	147.608	-9.143	-9.092	1.00	0.00
ATOM 373	HA	ASN A	29	145.932	-11.400	-9.619	1.00	0.00
ATOM 374	1HB	ASN A	29	148.778	-10.711	-9.939	1.00	0.00
ATOM 375	2HB	ASN A	29	148.468	-12.416	-9.627	1.00	0.00
ATOM 376	1HD2	ASN A	29	147.640	-9.721	-11.730	1.00	0.00



ATOM 377	2HD2	ASN	A	29	147.244	-10.682	-13.110	1.00	0.00
ATOM 378	N	PRO	A	30	147.958	-11.585	-6.976	1.00	0.00
ATOM 379	CA	PRO	A	30	148.142	-12.228	-5.674	1.00	0.00
ATOM 380	C	PRO	A	30	147.254	-11.613	-4.593	1.00	0.00
ATOM 381	O	PRO	A	30	147.455	-10.466	-4.194	1.00	0.00
ATOM 382	CB	PRO	A	30	149.614	-11.962	-5.367	1.00	0.00
ATOM 383	CG	PRO	A	30	149.906	-10.665	-6.040	1.00	0.00
ATOM 384	CD	PRO	A	30	149.040	-10.624	-7.274	1.00	0.00
ATOM 385	HA	PRO	A	30	147.968	-13.291	-5.727	1.00	0.00
ATOM 386	1HB	PRO	A	30	149.757	-11.895	-4.298	1.00	0.00
ATOM 387	2HB	PRO	A	30	150.220	-12.760	-5.769	1.00	0.00
ATOM 388	1HG	PRO	A	30	149.657	-9.846	-5.381	1.00	0.00
ATOM 389	2HG	PRO	A	30	150.949	-10.622	-6.315	1.00	0.00
ATOM 390	1HD	PRO	A	30	148.643	-9.631	-7.420	1.00	0.00
ATOM 391	2HD	PRO	A	30	149.604	-10.936	-8.140	1.00	0.00
ATOM 392	N	PRO	A	31	146.253	-12.366	-4.102	1.00	0.00
ATOM 393	CA	PRO	A	31	145.337	-11.880	-3.063	1.00	0.00
ATOM 394	C	PRO	A	31	146.064	-11.536	-1.768	1.00	0.00
ATOM 395	O	PRO	A	31	146.500	-12.422	-1.034	1.00	0.00
ATOM 396	CB	PRO	A	31	144.378	-13.056	-2.838	1.00	0.00
ATOM 397	CG	PRO	A	31	144.514	-13.909	-4.053	1.00	0.00
ATOM 398	CD	PRO	A	31	145.932	-13.743	-4.514	1.00	0.00
ATOM 399	HA	PRO	A	31	144.781	-11.018	-3.401	1.00	0.00
ATOM 400	1HB	PRO	A	31	144.666	-13.593	-1.946	1.00	0.00
ATOM 401	2HB	PRO	A	31	143.369	-12.685	-2.730	1.00	0.00
ATOM 402	1HG	PRO	A	31	144.319	-14.940	-3.802	1.00	0.00
ATOM 403	2HG	PRO	A	31	143.829	-13.571	-4.817	1.00	0.00
ATOM 404	1HD	PRO	A	31	146.576	-14.455	-4.020	1.00	0.00
ATOM 405	2HD	PRO	A	31	145.997	-13.849	-5.586	1.00	0.00

ATOM 406	N	PHE A	32	146.191	-10.242	-1.492	1.00	0.00
ATOM 407	CA	PHE A	32	146.864	-9.781	-0.283	1.00	0.00
ATOM 408	C	PHE A	32	146.068	-8.670	0.395	1.00	0.00
ATOM 409	O	PHE A	32	145.464	-7.831	-0.273	1.00	0.00
ATOM 410	CB	PHE A	32	148.273	-9.285	-0.615	1.00	0.00
ATOM 411	CG	PHE A	32	148.295	-8.133	-1.580	1.00	0.00
ATOM 412	CD1	PHE A	32	147.870	-6.875	-1.187	1.00	0.00
ATOM 413	CD2	PHE A	32	148.741	-8.311	-2.879	1.00	0.00
ATOM 414	CE1	PHE A	32	147.889	-5.815	-2.073	1.00	0.00
ATOM 415	CE2	PHE A	32	148.763	-7.254	-3.769	1.00	0.00
ATOM 416	CZ	PHE A	32	148.337	-6.004	-3.366	1.00	0.00
ATOM 417	H	PHE A	32	145.822	-9.581	-2.115	1.00	0.00
ATOM 418	HA	PHE A	32	146.938	-10.618	0.394	1.00	0.00
ATOM 419	1HB	PHE A	32	148.757	-8.964	0.295	1.00	0.00
ATOM 420	2HB	PHE A	32	148.839	-10.095	-1.050	1.00	0.00
ATOM 421	HD1	PHE A	32	147.520	-6.724	-0.176	1.00	0.00
ATOM 422	HD2	PHE A	32	149.076	-9.288	-3.196	1.00	0.00
ATOM 423	HE1	PHE A	32	147.554	-4.838	-1.755	1.00	0.00
ATOM 424	HE2	PHE A	32	149.113	-7.405	-4.780	1.00	0.00
ATOM 425	HZ	PHE A	32	148.352	-5.177	-4.059	1.00	0.00
ATOM 426	N	TYR A	33	146.071	-8.673	1.724	1.00	0.00
ATOM 427	CA	TYR A	33	145.349	-7.666	2.492	1.00	0.00
ATOM 428	C	TYR A	33	146.315	-6.689	3.153	1.00	0.00
ATOM 429	O	TYR A	33	147.406	-7.072	3.575	1.00	0.00
ATOM 430	CB	TYR A	33	144.475	-8.335	3.555	1.00	0.00
ATOM 431	CG	TYR A	33	143.212	-8.953	2.999	1.00	0.00
ATOM 432	CD1	TYR A	33	142.857	-10.258	3.318	1.00	0.00
ATOM 433	CD2	TYR A	33	142.375	-8.232	2.157	1.00	0.00
ATOM 434	CE1	TYR A	33	141.704	-10.828	2.811	1.00	0.00

ATOM 435	CE2	TYR A	33	141.220	-8.794	1.647	1.00	0.00
ATOM 436	CZ	TYR A	33	140.888	-10.091	1.977	1.00	0.00
ATOM 437	OH	TYR A	33	139.740	-10.655	1.473	1.00	0.00
ATOM 438	H	TYR A	33	146.571	-9.369	2.199	1.00	0.00
ATOM 439	HA	TYR A	33	144.715	-7.121	1.809	1.00	0.00
ATOM 440	1HB	TYR A	33	145.042	-9.116	4.037	1.00	0.00
ATOM 441	2HB	TYR A	33	144.188	-7.598	4.290	1.00	0.00
ATOM 442	HD1	TYR A	33	143.497	-10.832	3.971	1.00	0.00
ATOM 443	HD2	TYR A	33	142.637	-7.216	1.900	1.00	0.00
ATOM 444	HE1	TYR A	33	141.445	-11.844	3.070	1.00	0.00
ATOM 445	HE2	TYR A	33	140.581	-8.217	0.994	1.00	0.00
ATOM 446	HH	TYR A	33	139.799	-10.701	0.515	1.00	0.00
ATOM 447	N	GLY A	34	145.909	-5.427	3.237	1.00	0.00
ATOM 448	CA	GLY A	34	146.751	-4.416	3.848	1.00	0.00
ATOM 449	C	GLY A	34	145.959	-3.219	4.337	1.00	0.00
ATOM 450	O	GLY A	34	144.841	-2.978	3.884	1.00	0.00
ATOM 451	H	GLY A	34	145.029	-5.181	2.883	1.00	0.00
ATOM 452	1HA	GLY A	34	147.273	-4.856	4.684	1.00	0.00
ATOM 453	2HA	GLY A	34	147.476	-4.081	3.121	1.00	0.00
ATOM 454	N	VAL A	35	146.541	-2.468	5.266	1.00	0.00
ATOM 455	CA	VAL A	35	145.884	-1.291	5.818	1.00	0.00
ATOM 456	C	VAL A	35	146.524	-0.008	5.294	1.00	0.00
ATOM 457	O	VAL A	35	147.743	0.072	5.144	1.00	0.00
ATOM 458	CB	VAL A	35	145.936	-1.289	7.360	1.00	0.00
ATOM 459	CG1	VAL A	35	147.377	-1.253	7.849	1.00	0.00
ATOM 460	CG2	VAL A	35	145.140	-0.120	7.925	1.00	0.00
ATOM 461	H	VAL A	35	147.434	-2.712	5.588	1.00	0.00
ATOM 462	HA	VAL A	35	144.848	-1.314	5.514	1.00	0.00
ATOM 463	HB	VAL A	35	145.486	-2.206	7.713	1.00	0.00

ATOM 464	1HG1	VAL	A	35	147.393	-1.031	8.905	1.00	0.00
ATOM 465	2HG1	VAL	A	35	147.920	-0.489	7.312	1.00	0.00
ATOM 466	3HG1	VAL	A	35	147.841	-2.213	7.675	1.00	0.00
ATOM 467	1HG2	VAL	A	35	144.771	0.491	7.115	1.00	0.00
ATOM 468	2HG2	VAL	A	35	145.777	0.476	8.563	1.00	0.00
ATOM 469	3HG2	VAL	A	35	144.307	-0.497	8.500	1.00	0.00
ATOM 470	N	ILE	A	36	145.694	0.991	5.016	1.00	0.00
ATOM 471	CA	ILE	A	36	146.181	2.269	4.508	1.00	0.00
ATOM 472	C	ILE	A	36	147.115	2.937	5.513	1.00	0.00
ATOM 473	O	ILE	A	36	146.824	2.986	6.708	1.00	0.00
ATOM 474	CB	ILE	A	36	145.017	3.229	4.186	1.00	0.00
ATOM 475	CG1	ILE	A	36	143.994	2.541	3.278	1.00	0.00
ATOM 476	CG2	ILE	A	36	145.541	4.501	3.533	1.00	0.00
ATOM 477	CD1	ILE	A	36	142.827	3.428	2.903	1.00	0.00
ATOM 478	H	ILE	A	36	144.733	0.868	5.157	1.00	0.00
ATOM 479	HA	ILE	A	36	146.727	2.079	3.596	1.00	0.00
ATOM 480	HB	ILE	A	36	144.538	3.502	5.114	1.00	0.00
ATOM 481	1HG1	ILE	A	36	144.482	2.233	2.367	1.00	0.00
ATOM 482	2HG1	ILE	A	36	143.601	1.671	3.784	1.00	0.00
ATOM 483	1HG2	ILE	A	36	145.386	4.447	2.465	1.00	0.00
ATOM 484	2HG2	ILE	A	36	146.597	4.602	3.738	1.00	0.00
ATOM 485	3HG2	ILE	A	36	145.013	5.354	3.931	1.00	0.00
ATOM 486	1HD1	ILE	A	36	142.347	3.036	2.018	1.00	0.00
ATOM 487	2HD1	ILE	A	36	143.183	4.428	2.706	1.00	0.00
ATOM 488	3HD1	ILE	A	36	142.116	3.452	3.716	1.00	0.00
ATOM 489	N	ARG	A	37	148.237	3.449	5.019	1.00	0.00
ATOM 490	CA	ARG	A	37	149.215	4.113	5.872	1.00	0.00
ATOM 491	C	ARG	A	37	149.395	5.571	5.462	1.00	0.00
ATOM 492	O	ARG	A	37	149.097	6.483	6.232	1.00	0.00

ATOM 493	CB	ARG A	37	150.558	3.383	5.807	1.00	0.00
ATOM 494	CG	ARG A	37	150.462	1.902	6.127	1.00	0.00
ATOM 495	CD	ARG A	37	149.957	1.669	7.543	1.00	0.00
ATOM 496	NE	ARG A	37	150.921	2.111	8.547	1.00	0.00
ATOM 497	CZ	ARG A	37	150.615	2.326	9.825	1.00	0.00
ATOM 498	NH1	ARG A	37	149.373	2.142	10.257	1.00	0.00
ATOM 499	NH2	ARG A	37	151.552	2.726	10.673	1.00	0.00
ATOM 500	H	ARG A	37	148.412	3.377	4.057	1.00	0.00
ATOM 501	HA	ARG A	37	148.847	4.080	6.887	1.00	0.00
ATOM 502	1HB	ARG A	37	150.964	3.489	4.811	1.00	0.00
ATOM 503	2HB	ARG A	37	151.237	3.839	6.513	1.00	0.00
ATOM 504	1HG	ARG A	37	149.779	1.436	5.432	1.00	0.00
ATOM 505	2HG	ARG A	37	151.441	1.457	6.027	1.00	0.00
ATOM 506	1HD	ARG A	37	149.036	2.217	7.676	1.00	0.00
ATOM 507	2HD	ARG A	37	149.770	0.614	7.675	1.00	0.00
ATOM 508	HE	ARG A	37	151.845	2.255	8.255	1.00	0.00
ATOM 509	1HH1	ARG A	37	148.661	1.839	9.623	1.00	0.00
ATOM 510	2HH1	ARG A	37	149.150	2.304	11.218	1.00	0.00
ATOM 511	1HH2	ARG A	37	152.488	2.866	10.352	1.00	0.00
ATOM 512	2HH2	ARG A	37	151.322	2.887	11.632	1.00	0.00
ATOM 513	N	TRP A	38	149.882	5.784	4.244	1.00	0.00
ATOM 514	CA	TRP A	38	150.100	7.132	3.733	1.00	0.00
ATOM 515	C	TRP A	38	149.375	7.336	2.406	1.00	0.00
ATOM 516	O	TRP A	38	149.482	6.516	1.495	1.00	0.00
ATOM 517	CB	TRP A	38	151.599	7.402	3.559	1.00	0.00
ATOM 518	CG	TRP A	38	151.898	8.654	2.788	1.00	0.00
ATOM 519	CD1	TRP A	38	152.099	9.904	3.297	1.00	0.00
ATOM 520	CD2	TRP A	38	152.022	8.774	1.366	1.00	0.00
ATOM 521	NE1	TRP A	38	152.341	10.795	2.279	1.00	0.00

ATOM 522	CE2	TRP	A	38	152.299	10.126	1.084	1.00	0.00
ATOM 523	CE3	TRP	A	38	151.926	7.871	0.304	1.00	0.00
ATOM 524	CZ2	TRP	A	38	152.481	10.593	-0.216	1.00	0.00
ATOM 525	CZ3	TRP	A	38	152.107	8.335	-0.985	1.00	0.00
ATOM 526	CH2	TRP	A	38	152.381	9.685	-1.236	1.00	0.00
ATOM 527	H	TRP	A	38	150.101	5.016	3.675	1.00	0.00
ATOM 528	HA	TRP	A	38	149.700	7.828	4.456	1.00	0.00
ATOM 529	1HB	TRP	A	38	152.056	7.494	4.533	1.00	0.00
ATOM 530	2HB	TRP	A	38	152.049	6.571	3.035	1.00	0.00
ATOM 531	HD1	TRP	A	38	152.068	10.144	4.350	1.00	0.00
ATOM 532	HE1	TRP	A	38	152.516	11.753	2.391	1.00	0.00
ATOM 533	HE3	TRP	A	38	151.715	6.827	0.477	1.00	0.00
ATOM 534	HZ2	TRP	A	38	152.690	11.631	-0.427	1.00	0.00
ATOM 535	HZ3	TRP	A	38	152.037	7.652	-1.818	1.00	0.00
ATOM 536	HH2	TRP	A	38	152.516	10.004	-2.259	1.00	0.00
ATOM 537	N	ILE	A	39	148.646	8.442	2.303	1.00	0.00
ATOM 538	CA	ILE	A	39	147.911	8.766	1.088	1.00	0.00
ATOM 539	C	ILE	A	39	148.340	10.125	0.546	1.00	0.00
ATOM 540	O	ILE	A	39	147.988	11.165	1.104	1.00	0.00
ATOM 541	CB	ILE	A	39	146.391	8.780	1.335	1.00	0.00
ATOM 542	CG1	ILE	A	39	145.961	7.521	2.089	1.00	0.00
ATOM 543	CG2	ILE	A	39	145.640	8.896	0.016	1.00	0.00
ATOM 544	CD1	ILE	A	39	144.572	7.613	2.680	1.00	0.00
ATOM 545	H	ILE	A	39	148.608	9.060	3.063	1.00	0.00
ATOM 546	HA	ILE	A	39	148.130	8.008	0.350	1.00	0.00
ATOM 547	HB	ILE	A	39	146.153	9.647	1.932	1.00	0.00
ATOM 548	1HG1	ILE	A	39	145.977	6.680	1.411	1.00	0.00
ATOM 549	2HG1	ILE	A	39	146.656	7.338	2.897	1.00	0.00
ATOM 550	1HG2	ILE	A	39	144.577	8.847	0.202	1.00	0.00

ATOM 551	2HG2	ILE A	39	145.930	8.085	-0.636	1.00	0.00
ATOM 552	3HG2	ILE A	39	145.880	9.839	-0.453	1.00	0.00
ATOM 553	1HD1	ILE A	39	143.973	8.287	2.086	1.00	0.00
ATOM 554	2HD1	ILE A	39	144.635	7.984	3.692	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.116	6.634	2.682	1.00	0.00
ATOM 556	N	GLY A	40	149.108	10.112	-0.539	1.00	0.00
ATOM 557	CA	GLY A	40	149.576	11.353	-1.126	1.00	0.00
ATOM 558	C	GLY A	40	150.128	11.169	-2.526	1.00	0.00
ATOM 559	O	GLY A	40	149.973	10.107	-3.129	1.00	0.00
ATOM 560	H	GLY A	40	149.362	9.254	-0.940	1.00	0.00
ATOM 561	1HA	GLY A	40	148.755	12.052	-1.165	1.00	0.00
ATOM 562	2HA	GLY A	40	150.351	11.763	-0.498	1.00	0.00
ATOM 563	N	GLN A	41	150.772	12.210	-3.042	1.00	0.00
ATOM 564	CA	GLN A	41	151.352	12.170	-4.378	1.00	0.00
ATOM 565	C	GLN A	41	152.824	12.581	-4.341	1.00	0.00
ATOM 566	O	GLN A	41	153.146	13.724	-4.012	1.00	0.00
ATOM 567	CB	GLN A	41	150.574	13.098	-5.310	1.00	0.00
ATOM 568	CG	GLN A	41	149.068	12.908	-5.240	1.00	0.00
ATOM 569	CD	GLN A	41	148.312	14.221	-5.293	1.00	0.00
ATOM 570	OE1	GLN A	41	148.274	14.968	-4.315	1.00	0.00
ATOM 571	NE2	GLN A	41	147.705	14.509	-6.437	1.00	0.00
ATOM 572	H	GLN A	41	150.861	13.027	-2.510	1.00	0.00
ATOM 573	HA	GLN A	41	151.277	11.159	-4.745	1.00	0.00
ATOM 574	1HB	GLN A	41	150.798	14.121	-5.048	1.00	0.00
ATOM 575	2HB	GLN A	41	150.892	12.919	-6.325	1.00	0.00
ATOM 576	1HG	GLN A	41	148.754	12.298	-6.074	1.00	0.00
ATOM 577	2HG	GLN A	41	148.824	12.406	-4.316	1.00	0.00
ATOM 578	1HE2	GLN A	41	147.778	13.866	-7.174	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.211	15.351	-6.500	1.00	0.00

ATOM 580	N	PRO A	42	153.742	11.656	-4.675	1.00	0.00
ATOM 581	CA	PRO A	42	155.181	11.939	-4.673	1.00	0.00
ATOM 582	C	PRO A	42	155.542	13.108	-5.584	1.00	0.00
ATOM 583	O	PRO A	42	154.782	13.461	-6.486	1.00	0.00
ATOM 584	CB	PRO A	42	155.808	10.641	-5.194	1.00	0.00
ATOM 585	CG	PRO A	42	154.786	9.590	-4.928	1.00	0.00
ATOM 586	CD	PRO A	42	153.455	10.268	-5.079	1.00	0.00
ATOM 587	HA	PRO A	42	155.542	12.139	-3.674	1.00	0.00
ATOM 588	1HB	PRO A	42	156.012	10.737	-6.250	1.00	0.00
ATOM 589	2HB	PRO A	42	156.725	10.442	-4.661	1.00	0.00
ATOM 590	1HG	PRO A	42	154.883	8.791	-5.647	1.00	0.00
ATOM 591	2HG	PRO A	42	154.901	9.210	-3.923	1.00	0.00
ATOM 592	1HD	PRO A	42	153.124	10.226	-6.107	1.00	0.00
ATOM 593	2HD	PRO A	42	152.724	9.819	-4.424	1.00	0.00
ATOM 594	N	PRO A	43	156.714	13.726	-5.360	1.00	0.00
ATOM 595	CA	PRO A	43	157.174	14.860	-6.166	1.00	0.00
ATOM 596	C	PRO A	43	157.596	14.441	-7.569	1.00	0.00
ATOM 597	O	PRO A	43	158.768	14.155	-7.816	1.00	0.00
ATOM 598	CB	PRO A	43	158.377	15.386	-5.384	1.00	0.00
ATOM 599	CG	PRO A	43	158.887	14.204	-4.634	1.00	0.00
ATOM 600	CD	PRO A	43	157.681	13.366	-4.305	1.00	0.00
ATOM 601	HA	PRO A	43	156.419	15.630	-6.233	1.00	0.00
ATOM 602	1HB	PRO A	43	159.117	15.767	-6.073	1.00	0.00
ATOM 603	2HB	PRO A	43	158.061	16.171	-4.714	1.00	0.00
ATOM 604	1HG	PRO A	43	159.573	13.646	-5.253	1.00	0.00
ATOM 605	2HG	PRO A	43	159.376	14.528	-3.728	1.00	0.00
ATOM 606	1HD	PRO A	43	157.928	12.316	-4.350	1.00	0.00
ATOM 607	2HD	PRO A	43	157.298	13.624	-3.329	1.00	0.00
ATOM 608	N	GLY A	44	156.635	14.406	-8.486	1.00	0.00



ATOM 609	CA	GLY A	44	156.931	14.021	-9.852	1.00	0.00
ATOM 610	C	GLY A	44	155.710	13.511	-10.590	1.00	0.00
ATOM 611	O	GLY A	44	155.412	13.962	-11.696	1.00	0.00
ATOM 612	H	GLY A	44	155.719	14.645	-8.232	1.00	0.00
ATOM 613	1HA	GLY A	44	157.323	14.877	-10.378	1.00	0.00
ATOM 614	2HA	GLY A	44	157.681	13.245	-9.840	1.00	0.00
ATOM 615	N	LEU A	45	155.002	12.568	-9.979	1.00	0.00
ATOM 616	CA	LEU A	45	153.807	11.996	-10.589	1.00	0.00
ATOM 617	C	LEU A	45	152.592	12.203	-9.694	1.00	0.00
ATOM 618	O	LEU A	45	152.501	11.623	-8.612	1.00	0.00
ATOM 619	CB	LEU A	45	154.011	10.504	-10.858	1.00	0.00
ATOM 620	CG	LEU A	45	154.560	9.704	-9.674	1.00	0.00
ATOM 621	CD1	LEU A	45	154.219	8.227	-9.821	1.00	0.00
ATOM 622	CD2	LEU A	45	156.066	9.899	-9.551	1.00	0.00
ATOM 623	H	LEU A	45	155.289	12.247	-9.096	1.00	0.00
ATOM 624	HA	LEU A	45	153.640	12.503	-11.528	1.00	0.00
ATOM 625	1HB	LEU A	45	153.060	10.079	-11.144	1.00	0.00
ATOM 626	2HB	LEU A	45	154.698	10.399	-11.684	1.00	0.00
ATOM 627	HG	LEU A	45	154.101	10.062	-8.764	1.00	0.00
ATOM 628	1HD1	LEU A	45	153.622	8.081	-10.710	1.00	0.00
ATOM 629	2HD1	LEU A	45	153.661	7.900	-8.956	1.00	0.00
ATOM 630	3HD1	LEU A	45	155.130	7.652	-9.900	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.572	8.983	-9.824	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.312	10.155	-8.530	1.00	0.00
ATOM 633	3HD2	LEU A	45	156.383	10.694	-10.208	1.00	0.00
ATOM 634	N	ASN A	46	151.656	13.030	-10.149	1.00	0.00
ATOM 635	CA	ASN A	46	150.449	13.299	-9.377	1.00	0.00
ATOM 636	C	ASN A	46	149.512	12.098	-9.414	1.00	0.00
ATOM 637	O	ASN A	46	148.893	11.810	-10.438	1.00	0.00

ATOM 638	CB	ASN A	46	149.736	14.537	-9.925	1.00	0.00
ATOM 639	CG	ASN A	46	148.974	15.289	-8.852	1.00	0.00
ATOM 640	OD1	ASN A	46	147.746	15.375	-8.891	1.00	0.00
ATOM 641	ND2	ASN A	46	149.700	15.838	-7.884	1.00	0.00
ATOM 642	H	ASN A	46	151.778	13.465	-11.018	1.00	0.00
ATOM 643	HA	ASN A	46	150.742	13.484	-8.355	1.00	0.00
ATOM 644	1HB	ASN A	46	150.466	15.205	-10.356	1.00	0.00
ATOM 645	2HB	ASN A	46	149.038	14.232	-10.691	1.00	0.00
ATOM 646	1HD2	ASN A	46	150.673	15.727	-7.917	1.00	0.00
ATOM 647	2HD2	ASN A	46	149.233	16.329	-7.178	1.00	0.00
ATOM 648	N	GLU A	47	149.415	11.401	-8.288	1.00	0.00
ATOM 649	CA	GLU A	47	148.555	10.230	-8.183	1.00	0.00
ATOM 650	C	GLU A	47	148.375	9.820	-6.726	1.00	0.00
ATOM 651	O	GLU A	47	149.348	9.519	-6.034	1.00	0.00
ATOM 652	CB	GLU A	47	149.138	9.063	-8.985	1.00	0.00
ATOM 653	CG	GLU A	47	150.653	8.959	-8.902	1.00	0.00
ATOM 654	CD	GLU A	47	151.235	8.068	-9.981	1.00	0.00
ATOM 655	OE1	GLU A	47	151.350	8.531	-11.134	1.00	0.00
ATOM 656	OE2	GLU A	47	151.575	6.905	-9.672	1.00	0.00
ATOM 657	H	GLU A	47	149.935	11.682	-7.507	1.00	0.00
ATOM 658	HA	GLU A	47	147.590	10.490	-8.592	1.00	0.00
ATOM 659	1HB	GLU A	47	148.715	8.141	-8.616	1.00	0.00
ATOM 660	2HB	GLU A	47	148.864	9.183	-10.022	1.00	0.00
ATOM 661	1HG	GLU A	47	151.075	9.946	-9.006	1.00	0.00
ATOM 662	2HG	GLU A	47	150.922	8.554	-7.937	1.00	0.00
ATOM 663	N	VAL A	48	147.130	9.802	-6.264	1.00	0.00
ATOM 664	CA	VAL A	48	146.839	9.420	-4.889	1.00	0.00
ATOM 665	C	VAL A	48	147.232	7.969	-4.639	1.00	0.00
ATOM 666	O	VAL A	48	146.502	7.047	-5.001	1.00	0.00

ATOM 667	CB	VAL A	48	145.346	9.605	-4.557	1.00	0.00
ATOM 668	CG1	VAL A	48	145.100	9.395	-3.071	1.00	0.00
ATOM 669	CG2	VAL A	48	144.867	10.980	-4.996	1.00	0.00
ATOM 670	H	VAL A	48	146.393	10.047	-6.862	1.00	0.00
ATOM 671	HA	VAL A	48	147.417	10.058	-4.236	1.00	0.00
ATOM 672	HB	VAL A	48	144.783	8.860	-5.100	1.00	0.00
ATOM 673	1HG1	VAL A	48	144.082	9.666	-2.834	1.00	0.00
ATOM 674	2HG1	VAL A	48	145.780	10.014	-2.503	1.00	0.00
ATOM 675	3HG1	VAL A	48	145.265	8.358	-2.821	1.00	0.00
ATOM 676	1HG2	VAL A	48	145.704	11.662	-5.017	1.00	0.00
ATOM 677	2HG2	VAL A	48	144.125	11.342	-4.301	1.00	0.00
ATOM 678	3HG2	VAL A	48	144.433	10.912	-5.983	1.00	0.00
ATOM 679	N	LEU A	49	148.392	7.774	-4.021	1.00	0.00
ATOM 680	CA	LEU A	49	148.884	6.434	-3.727	1.00	0.00
ATOM 681	C	LEU A	49	148.782	6.135	-2.237	1.00	0.00
ATOM 682	O	LEU A	49	149.437	6.780	-1.418	1.00	0.00
ATOM 683	CB	LEU A	49	150.333	6.286	-4.190	1.00	0.00
ATOM 684	CG	LEU A	49	150.544	6.396	-5.702	1.00	0.00
ATOM 685	CD1	LEU A	49	151.921	6.965	-6.009	1.00	0.00
ATOM 686	CD2	LEU A	49	150.367	5.038	-6.363	1.00	0.00
ATOM 687	H	LEU A	49	148.932	8.549	-3.758	1.00	0.00
ATOM 688	HA	LEU A	49	148.269	5.729	-4.266	1.00	0.00
ATOM 689	1HB	LEU A	49	150.924	7.053	-3.709	1.00	0.00
ATOM 690	2HB	LEU A	49	150.696	5.322	-3.869	1.00	0.00
ATOM 691	HG	LEU A	49	149.806	7.068	-6.114	1.00	0.00
ATOM 692	1HD1	LEU A	49	151.845	8.033	-6.150	1.00	0.00
ATOM 693	2HD1	LEU A	49	152.306	6.509	-6.908	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.588	6.757	-5.186	1.00	0.00
ATOM 695	1HD2	LEU A	49	151.056	4.331	-5.924	1.00	0.00

ATOM 696	2HD2	LEU A	49	150.566	5.123	-7.421	1.00	0.00
ATOM 697	3HD2	LEU A	49	149.354	4.694	-6.214	1.00	0.00
ATOM 698	N	ALA A	50	147.954	5.157	-1.890	1.00	0.00
ATOM 699	CA	ALA A	50	147.767	4.778	-0.498	1.00	0.00
ATOM 700	C	ALA A	50	148.728	3.663	-0.099	1.00	0.00
ATOM 701	O	ALA A	50	148.645	2.546	-0.611	1.00	0.00
ATOM 702	CB	ALA A	50	146.329	4.352	-0.254	1.00	0.00
ATOM 703	H	ALA A	50	147.457	4.680	-2.588	1.00	0.00
ATOM 704	HA	ALA A	50	147.968	5.649	0.110	1.00	0.00
ATOM 705	1HB	ALA A	50	146.304	3.578	0.500	1.00	0.00
ATOM 706	2HB	ALA A	50	145.905	3.973	-1.172	1.00	0.00
ATOM 707	3HB	ALA A	50	145.753	5.201	0.084	1.00	0.00
ATOM 708	N	GLY A	51	149.639	3.971	0.818	1.00	0.00
ATOM 709	CA	GLY A	51	150.601	2.984	1.269	1.00	0.00
ATOM 710	C	GLY A	51	149.968	1.910	2.133	1.00	0.00
ATOM 711	O	GLY A	51	149.673	2.142	3.305	1.00	0.00
ATOM 712	H	GLY A	51	149.657	4.877	1.191	1.00	0.00
ATOM 713	1HA	GLY A	51	151.053	2.516	0.406	1.00	0.00
ATOM 714	2HA	GLY A	51	151.371	3.482	1.839	1.00	0.00
ATOM 715	N	LEU A	52	149.760	0.733	1.554	1.00	0.00
ATOM 716	CA	LEU A	52	149.158	-0.379	2.279	1.00	0.00
ATOM 717	C	LEU A	52	150.226	-1.227	2.962	1.00	0.00
ATOM 718	O	LEU A	52	151.311	-1.435	2.418	1.00	0.00
ATOM 719	CB	LEU A	52	148.331	-1.247	1.329	1.00	0.00
ATOM 720	CG	LEU A	52	147.092	-0.567	0.742	1.00	0.00
ATOM 721	CD1	LEU A	52	146.492	-1.417	-0.367	1.00	0.00
ATOM 722	CD2	LEU A	52	146.064	-0.305	1.832	1.00	0.00
ATOM 723	H	LEU A	52	150.018	0.609	0.617	1.00	0.00
ATOM 724	HA	LEU A	52	148.505	0.033	3.035	1.00	0.00

ATOM 725	1HB	LEU A	52	148.968	-1.558	0.513	1.00	0.00
ATOM 726	2HB	LEU A	52	148.010	-2.127	1.866	1.00	0.00
ATOM 727	HG	LEU A	52	147.380	0.383	0.317	1.00	0.00
ATOM 728	1HD1	LEU A	52	146.896	-1.104	-1.319	1.00	0.00
ATOM 729	2HD1	LEU A	52	145.420	-1.294	-0.374	1.00	0.00
ATOM 730	3HD1	LEU A	52	146.736	-2.456	-0.197	1.00	0.00
ATOM 731	1HD2	LEU A	52	146.171	-1.044	2.613	1.00	0.00
ATOM 732	2HD2	LEU A	52	145.071	-0.367	1.412	1.00	0.00
ATOM 733	3HD2	LEU A	52	146.220	0.680	2.245	1.00	0.00
ATOM 734	N	GLU A	53	149.911	-1.716	4.157	1.00	0.00
ATOM 735	CA	GLU A	53	150.842	-2.542	4.916	1.00	0.00
ATOM 736	C	GLU A	53	150.337	-3.977	5.018	1.00	0.00
ATOM 737	O	GLU A	53	149.366	-4.256	5.720	1.00	0.00
ATOM 738	CB	GLU A	53	151.049	-1.961	6.316	1.00	0.00
ATOM 739	CG	GLU A	53	152.034	-2.750	7.163	1.00	0.00
ATOM 740	CD	GLU A	53	151.587	-2.881	8.606	1.00	0.00
ATOM 741	OE1	GLU A	53	152.298	-2.368	9.497	1.00	0.00
ATOM 742	OE2	GLU A	53	150.528	-3.497	8.845	1.00	0.00
ATOM 743	H	GLU A	53	149.031	-1.515	4.539	1.00	0.00
ATOM 744	HA	GLU A	53	151.787	-2.541	4.393	1.00	0.00
ATOM 745	1HB	GLU A	53	151.416	-0.950	6.224	1.00	0.00
ATOM 746	2HB	GLU A	53	150.099	-1.944	6.830	1.00	0.00
ATOM 747	1HG	GLU A	53	152.138	-3.739	6.743	1.00	0.00
ATOM 748	2HG	GLU A	53	152.990	-2.248	7.141	1.00	0.00
ATOM 749	N	LEU A	54	151.003	-4.885	4.310	1.00	0.00
ATOM 750	CA	LEU A	54	150.620	-6.292	4.319	1.00	0.00
ATOM 751	C	LEU A	54	150.836	-6.904	5.700	1.00	0.00
ATOM 752	O	LEU A	54	151.871	-6.692	6.329	1.00	0.00
ATOM 753	CB	LEU A	54	151.423	-7.067	3.273	1.00	0.00

ATOM 754	CG	LEU A	54	151.413	-6.460	1.869	1.00	0.00
ATOM 755	CD1	LEU A	54	152.554	-7.023	1.036	1.00	0.00
ATOM 756	CD2	LEU A	54	150.076	-6.717	1.189	1.00	0.00
ATOM 757	H	LEU A	54	151.769	-4.601	3.768	1.00	0.00
ATOM 758	HA	LEU A	54	149.571	-6.352	4.072	1.00	0.00
ATOM 759	1HB	LEU A	54	152.448	-7.128	3.610	1.00	0.00
ATOM 760	2HB	LEU A	54	151.022	-8.068	3.211	1.00	0.00
ATOM 761	HG	LEU A	54	151.551	-5.392	1.944	1.00	0.00
ATOM 762	1HD1	LEU A	54	152.684	-8.071	1.266	1.00	0.00
ATOM 763	2HD1	LEU A	54	153.463	-6.489	1.263	1.00	0.00
ATOM 764	3HD1	LEU A	54	152.323	-6.911	-0.013	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.629	-7.612	1.599	1.00	0.00
ATOM 766	2HD2	LEU A	54	150.230	-6.846	0.128	1.00	0.00
ATOM 767	3HD2	LEU A	54	149.419	-5.877	1.357	1.00	0.00
ATOM 768	N	GLU A	55	149.850	-7.665	6.164	1.00	0.00
ATOM 769	CA	GLU A	55	149.930	-8.310	7.469	1.00	0.00
ATOM 770	C	GLU A	55	151.044	-9.351	7.494	1.00	0.00
ATOM 771	O	GLU A	55	151.685	-9.565	8.524	1.00	0.00
ATOM 772	CB	GLU A	55	148.594	-8.967	7.822	1.00	0.00
ATOM 773	CG	GLU A	55	147.552	-7.987	8.337	1.00	0.00
ATOM 774	CD	GLU A	55	146.137	-8.398	7.975	1.00	0.00
ATOM 775	OE1	GLU A	55	145.968	-9.127	6.975	1.00	0.00
ATOM 776	OE2	GLU A	55	145.200	-7.990	8.692	1.00	0.00
ATOM 777	H	GLU A	55	149.048	-7.797	5.615	1.00	0.00
ATOM 778	HA	GLU A	55	150.150	-7.547	8.202	1.00	0.00
ATOM 779	1HB	GLU A	55	148.199	-9.448	6.939	1.00	0.00
ATOM 780	2HB	GLU A	55	148.763	-9.712	8.584	1.00	0.00
ATOM 781	1HG	GLU A	55	147.630	-7.930	9.412	1.00	0.00
ATOM 782	2HG	GLU A	55	147.749	-7.015	7.910	1.00	0.00

ATOM 783	N	ASP A	56	151.269	-9.997	6.356	1.00	0.00
ATOM 784	CA	ASP A	56	152.306	-11.017	6.248	1.00	0.00
ATOM 785	C	ASP A	56	153.580	-10.435	5.642	1.00	0.00
ATOM 786	O	ASP A	56	153.529	-9.483	4.864	1.00	0.00
ATOM 787	CB	ASP A	56	151.812	-12.189	5.397	1.00	0.00
ATOM 788	CG	ASP A	56	150.930	-13.140	6.180	1.00	0.00
ATOM 789	OD1	ASP A	56	149.691	-13.034	6.064	1.00	0.00
ATOM 790	OD2	ASP A	56	151.478	-13.993	6.910	1.00	0.00
ATOM 791	H	ASP A	56	150.725	-9.784	5.569	1.00	0.00
ATOM 792	HA	ASP A	56	152.526	-11.374	7.243	1.00	0.00
ATOM 793	1HB	ASP A	56	151.244	-11.805	4.563	1.00	0.00
ATOM 794	2HB	ASP A	56	152.664	-12.739	5.024	1.00	0.00
ATOM 795	N	GLU A	57	154.719	-11.014	6.006	1.00	0.00
ATOM 796	CA	GLU A	57	156.006	-10.552	5.498	1.00	0.00
ATOM 797	C	GLU A	57	156.353	-11.245	4.184	1.00	0.00
ATOM 798	O	GLU A	57	156.738	-12.414	4.170	1.00	0.00
ATOM 799	CB	GLU A	57	157.107	-10.810	6.529	1.00	0.00
ATOM 800	CG	GLU A	57	157.130	-9.795	7.660	1.00	0.00
ATOM 801	CD	GLU A	57	158.393	-9.882	8.496	1.00	0.00
ATOM 802	OE1	GLU A	57	158.992	-10.976	8.553	1.00	0.00
ATOM 803	OE2	GLU A	57	158.782	-8.856	9.092	1.00	0.00
ATOM 804	H	GLU A	57	154.694	-11.769	6.630	1.00	0.00
ATOM 805	HA	GLU A	57	155.932	-9.490	5.323	1.00	0.00
ATOM 806	1HB	GLU A	57	156.960	-11.791	6.958	1.00	0.00
ATOM 807	2HB	GLU A	57	158.064	-10.784	6.031	1.00	0.00
ATOM 808	1HG	GLU A	57	157.065	-8.803	7.238	1.00	0.00
ATOM 809	2HG	GLU A	57	156.278	-9.969	8.301	1.00	0.00
ATOM 810	N	CYS A	58	156.214	-10.515	3.082	1.00	0.00
ATOM 811	CA	CYS A	58	156.513	-11.058	1.762	1.00	0.00

ATOM 812	C	CYS A	58	157.824	-10.492	1.225	1.00	0.00
ATOM 813	O	CYS A	58	157.973	-9.279	1.077	1.00	0.00
ATOM 814	CB	CYS A	58	155.374	-10.750	-0.790	1.00	0.00
ATOM 815	SG	CYS A	58	155.604	-11.445	-0.862	1.00	0.00
ATOM 816	H	CYS A	58	155.904	-9.589	3.158	1.00	0.00
ATOM 817	HA	CYS A	58	156.612	-12.129	1.860	1.00	0.00
ATOM 818	1HB	CYS A	58	154.453	-11.150	1.188	1.00	0.00
ATOM 819	2HB	CYS A	58	155.279	-9.678	0.687	1.00	0.00
ATOM 820	HG	CYS A	58	156.540	-11.627	-0.979	1.00	0.00
ATOM 821	N	ALA A	59	158.770	-11.378	0.933	1.00	0.00
ATOM 822	CA	ALA A	59	160.067	-10.966	0.411	1.00	0.00
ATOM 823	C	ALA A	59	159.915	-10.208	-0.903	1.00	0.00
ATOM 824	O	ALA A	59	159.155	-10.615	-1.782	1.00	0.00
ATOM 825	CB	ALA A	59	160.968	-12.177	0.223	1.00	0.00
ATOM 826	H	ALA A	59	158.592	-12.331	1.071	1.00	0.00
ATOM 827	HA	ALA A	59	160.528	-10.315	1.140	1.00	0.00
ATOM 828	1HB	ALA A	59	160.734	-12.921	0.969	1.00	0.00
ATOM 829	2HB	ALA A	59	162.001	-11.877	0.326	1.00	0.00
ATOM 830	3HB	ALA A	59	160.811	-12.593	-0.762	1.00	0.00
ATOM 831	N	GLY A	60	160.643	-9.103	-1.031	1.00	0.00
ATOM 832	CA	GLY A	60	160.574	-8.305	-2.241	1.00	0.00
ATOM 833	C	GLY A	60	160.044	-6.908	-1.985	1.00	0.00
ATOM 834	O	GLY A	60	160.381	-5.967	-2.703	1.00	0.00
ATOM 835	H	GLY A	60	161.231	-8.827	-0.298	1.00	0.00
ATOM 836	1HA	GLY A	60	161.564	-8.229	-2.666	1.00	0.00
ATOM 837	2HA	GLY A	60	159.927	-8.799	-2.951	1.00	0.00
ATOM 838	N	CYS A	61	159.210	-6.773	-0.959	1.00	0.00
ATOM 839	CA	CYS A	61	158.631	-5.480	-0.610	1.00	0.00
ATOM 840	C	CYS A	61	159.598	-4.662	0.240	1.00	0.00



ATOM 841	O	CYS A	61	160.705	-5.109	0.542	1.00	0.00
ATOM 842	CB	CYS A	61	157.314	-5.675	0.143	1.00	0.00
ATOM 843	SG	CYS A	61	156.183	-6.848	-0.641	1.00	0.00
ATOM 844	H	CYS A	61	158.978	-7.560	-0.424	1.00	0.00
ATOM 845	HA	CYS A	61	158.435	-4.946	-1.527	1.00	0.00
ATOM 846	1HB	CYS A	61	157.525	-6.040	1.137	1.00	0.00
ATOM 847	2HB	CYS A	61	156.804	-4.725	0.215	1.00	0.00
ATOM 848	HG	CYS A	61	156.528	-7.057	-1.512	1.00	0.00
ATOM 849	N	THR A	62	159.174	-3.462	0.620	1.00	0.00
ATOM 850	CA	THR A	62	160.003	-2.581	1.435	1.00	0.00
ATOM 851	C	THR A	62	159.434	-2.448	2.844	1.00	0.00
ATOM 852	O	THR A	62	158.454	-3.106	3.192	1.00	0.00
ATOM 853	CB	THR A	62	160.110	-1.201	0.784	1.00	0.00
ATOM 854	OG1	THR A	62	158.839	-0.580	0.714	1.00	0.00
ATOM 855	CG2	THR A	62	160.677	-1.243	-0.618	1.00	0.00
ATOM 856	H	THR A	62	158.283	-3.161	0.347	1.00	0.00
ATOM 857	HA	THR A	62	160.989	-3.017	1.497	1.00	0.00
ATOM 858	HB	THR A	62	160.758	-0.580	1.385	1.00	0.00
ATOM 859	HG1	THR A	62	158.243	-1.125	0.195	1.00	0.00
ATOM 860	1HG2	THR A	62	160.591	-2.245	-1.011	1.00	0.00
ATOM 861	2HG2	THR A	62	161.718	-0.954	-0.595	1.00	0.00
ATOM 862	3HG2	THR A	62	160.128	-0.561	-1.250	1.00	0.00
ATOM 863	N	ASP A	63	160.056	-1.594	3.649	1.00	0.00
ATOM 864	CA	ASP A	63	159.612	-1.375	5.021	1.00	0.00
ATOM 865	C	ASP A	63	158.866	-0.050	5.147	1.00	0.00
ATOM 866	O	ASP A	63	158.935	0.616	6.180	1.00	0.00
ATOM 867	CB	ASP A	63	160.806	-1.393	5.976	1.00	0.00
ATOM 868	CG	ASP A	63	161.904	-0.439	5.547	1.00	0.00
ATOM 869	OD1	ASP A	63	162.936	-0.917	5.028	1.00	0.00

ATOM 870	OD2	ASP A	63	161.732	0.784	5.729	1.00	0.00
ATOM 871	H	ASP A	63	160.832	-1.098	3.314	1.00	0.00
ATOM 872	HA	ASP A	63	158.940	-2.178	5.284	1.00	0.00
ATOM 873	1HB	ASP A	63	160.475	-1.110	6.963	1.00	0.00
ATOM 874	2HB	ASP A	63	161.216	-2.393	6.011	1.00	0.00
ATOM 875	N	GLY A	64	158.156	0.325	4.089	1.00	0.00
ATOM 876	CA	GLY A	64	157.408	1.569	4.101	1.00	0.00
ATOM 877	C	GLY A	64	158.144	2.695	3.402	1.00	0.00
ATOM 878	O	GLY A	64	158.130	3.836	3.864	1.00	0.00
ATOM 879	H	GLY A	64	158.138	-0.246	3.293	1.00	0.00
ATOM 880	1HA	GLY A	64	156.460	1.412	3.608	1.00	0.00
ATOM 881	2HA	GLY A	64	157.225	1.856	5.126	1.00	0.00
ATOM 882	N	THR A	65	158.787	2.375	2.284	1.00	0.00
ATOM 883	CA	THR A	65	159.532	3.367	1.519	1.00	0.00
ATOM 884	C	THR A	65	159.121	3.343	0.051	1.00	0.00
ATOM 885	O	THR A	65	159.276	2.330	-0.631	1.00	0.00
ATOM 886	CB	THR A	65	161.036	3.116	1.644	1.00	0.00
ATOM 887	OG1	THR A	65	161.300	1.733	1.811	1.00	0.00
ATOM 888	CG2	THR A	65	161.670	3.849	2.806	1.00	0.00
ATOM 889	H	THR A	65	158.760	1.448	1.967	1.00	0.00
ATOM 890	HA	THR A	65	159.304	4.341	1.929	1.00	0.00
ATOM 891	HB	THR A	65	161.522	3.447	0.738	1.00	0.00
ATOM 892	HG1	THR A	65	161.736	1.394	1.027	1.00	0.00
ATOM 893	1HG2	THR A	65	161.388	3.369	3.731	1.00	0.00
ATOM 894	2HG2	THR A	65	161.331	4.874	2.813	1.00	0.00
ATOM 895	3HG2	THR A	65	162.745	3.826	2.702	1.00	0.00
ATOM 896	N	PHE A	66	158.597	4.466	-0.431	1.00	0.00
ATOM 897	CA	PHE A	66	158.164	4.572	-1.819	1.00	0.00
ATOM 898	C	PHE A	66	159.235	5.243	-2.672	1.00	0.00

ATOM 899	O	PHE A	66	159.380	6.465	-2.657	1.00	0.00
ATOM 900	CB	PHE A	66	156.857	5.362	-1.909	1.00	0.00
ATOM 901	CG	PHE A	66	156.098	5.124	-3.184	1.00	0.00
ATOM 902	CD1	PHE A	66	155.827	3.835	-3.613	1.00	0.00
ATOM 903	CD2	PHE A	66	155.657	6.190	-3.951	1.00	0.00
ATOM 904	CE1	PHE A	66	155.130	3.613	-4.786	1.00	0.00
ATOM 905	CE2	PHE A	66	154.959	5.974	-5.125	1.00	0.00
ATOM 906	CZ	PHE A	66	154.695	4.684	-5.542	1.00	0.00
ATOM 907	H	PHE A	66	158.499	5.240	0.162	1.00	0.00
ATOM 908	HA	PHE A	66	157.997	3.574	-2.192	1.00	0.00
ATOM 909	1HB	PHE A	66	156.218	5.082	-1.085	1.00	0.00
ATOM 910	2HB	PHE A	66	157.078	6.417	-1.844	1.00	0.00
ATOM 911	HD1	PHE A	66	156.166	2.997	-3.022	1.00	0.00
ATOM 912	HD2	PHE A	66	155.863	7.198	-3.626	1.00	0.00
ATOM 913	HE1	PHE A	66	154.926	2.603	-5.111	1.00	0.00
ATOM 914	HE2	PHE A	66	154.621	6.812	-5.715	1.00	0.00
ATOM 915	HZ	PHE A	66	154.150	4.514	-6.459	1.00	0.00
ATOM 916	N	ARG A	67	159.983	4.435	-3.417	1.00	0.00
ATOM 917	CA	ARG A	67	161.042	4.949	-4.278	1.00	0.00
ATOM 918	C	ARG A	67	162.083	5.713	-3.465	1.00	0.00
ATOM 919	O	ARG A	67	162.723	6.636	-3.969	1.00	0.00
ATOM 920	CB	ARG A	67	160.453	5.860	-5.357	1.00	0.00
ATOM 921	CG	ARG A	67	159.223	5.281	-6.038	1.00	0.00
ATOM 922	CD	ARG A	67	158.382	6.368	-6.687	1.00	0.00
ATOM 923	NE	ARG A	67	157.338	5.813	-7.546	1.00	0.00
ATOM 924	CZ	ARG A	67	157.567	5.297	-8.752	1.00	0.00
ATOM 925	NH1	ARG A	67	158.799	5.263	-9.244	1.00	0.00
ATOM 926	NH2	ARG A	67	156.561	4.814	-9.466	1.00	0.00
ATOM 927	H	ARG A	67	159.819	3.469	-3.387	1.00	0.00

ATOM 928	HA	ARG A	67	161.521	4.107	-4.753	1.00	0.00
ATOM 929	1HB	ARG A	67	160.177	6.802	-4.906	1.00	0.00
ATOM 930	2HB	ARG A	67	161.205	6.037	-6.112	1.00	0.00
ATOM 931	1HG	ARG A	67	159.539	4.582	-6.797	1.00	0.00
ATOM 932	2HG	ARG A	67	158.623	4.768	-5.300	1.00	0.00
ATOM 933	1HD	ARG A	67	157.919	6.959	-5.910	1.00	0.00
ATOM 934	2HD	ARG A	67	159.027	6.998	-7.281	1.00	0.00
ATOM 935	HE	ARG A	67	156.419	5.826	-7.206	1.00	0.00
ATOM 936	1HH1	ARG A	67	159.562	5.625	-8.709	1.00	0.00
ATOM 937	2HH1	ARG A	67	158.964	4.873	-10.149	1.00	0.00
ATOM 938	1HH2	ARG A	67	155.630	4.837	-9.101	1.00	0.00
ATOM 939	2HH2	ARG A	67	156.731	4.426	-10.372	1.00	0.00
ATOM 940	N	GLY A	68	162.246	5.323	-2.205	1.00	0.00
ATOM 941	CA	GLY A	68	163.211	5.983	-1.344	1.00	0.00
ATOM 942	C	GLY A	68	162.572	7.006	-0.425	1.00	0.00
ATOM 943	O	GLY A	68	163.149	7.375	0.598	1.00	0.00
ATOM 944	H	GLY A	68	161.708	4.581	-1.856	1.00	0.00
ATOM 945	1HA	GLY A	68	163.709	5.237	-0.743	1.00	0.00
ATOM 946	2HA	GLY A	68	163.946	6.480	-1.961	1.00	0.00
ATOM 947	N	THR A	69	161.378	7.467	-0.787	1.00	0.00
ATOM 948	CA	THR A	69	160.666	8.455	0.015	1.00	0.00
ATOM 949	C	THR A	69	159.834	7.778	1.100	1.00	0.00
ATOM 950	O	THR A	69	158.714	7.331	0.851	1.00	0.00
ATOM 951	CB	THR A	69	159.763	9.310	-0.875	1.00	0.00
ATOM 952	OG1	THR A	69	160.491	9.830	-1.974	1.00	0.00
ATOM 953	CG2	THR A	69	159.137	10.479	-0.146	1.00	0.00
ATOM 954	H	THR A	69	160.967	7.138	-1.614	1.00	0.00
ATOM 955	HA	THR A	69	161.399	9.091	0.486	1.00	0.00
ATOM 956	HB	THR A	69	158.964	8.693	-1.259	1.00	0.00

ATOM 957	HG1	THR	A	69	161.267	10.293	-1.655	1.00	0.00
ATOM 958	1HG2	THR	A	69	158.646	11.126	-0.857	1.00	0.00
ATOM 959	2HG2	THR	A	69	159.906	11.033	0.374	1.00	0.00
ATOM 960	3HG2	THR	A	69	158.413	10.113	0.567	1.00	0.00
ATOM 961	N	ARG	A	70	160.389	7.706	2.306	1.00	0.00
ATOM 962	CA	ARG	A	70	159.699	7.084	3.429	1.00	0.00
ATOM 963	C	ARG	A	70	158.562	7.971	3.925	1.00	0.00
ATOM 964	O	ARG	A	70	158.773	9.132	4.275	1.00	0.00
ATOM 965	CB	ARG	A	70	160.680	6.807	4.569	1.00	0.00
ATOM 966	CG	ARG	A	70	160.151	5.828	5.603	1.00	0.00
ATOM 967	CD	ARG	A	70	160.885	5.964	6.927	1.00	0.00
ATOM 968	NE	ARG	A	70	162.332	5.847	6.766	1.00	0.00
ATOM 969	CZ	ARG	A	70	163.172	5.583	7.765	1.00	0.00
ATOM 970	NH1	ARG	A	70	162.711	5.408	8.998	1.00	0.00
ATOM 971	NH2	ARG	A	70	164.473	5.494	7.532	1.00	0.00
ATOM 972	H	ARG	A	70	161.285	8.080	2.443	1.00	0.00
ATOM 973	HA	ARG	A	70	159.286	6.147	3.086	1.00	0.00
ATOM 974	1HB	ARG	A	70	161.592	6.402	4.154	1.00	0.00
ATOM 975	2HB	ARG	A	70	160.906	7.738	5.069	1.00	0.00
ATOM 976	1HG	ARG	A	70	159.102	6.021	5.764	1.00	0.00
ATOM 977	2HG	ARG	A	70	160.282	4.821	5.232	1.00	0.00
ATOM 978	1HD	ARG	A	70	160.658	6.931	7.352	1.00	0.00
ATOM 979	2HD	ARG	A	70	160.543	5.189	7.596	1.00	0.00
ATOM 980	HE	ARG	A	70	162.699	5.971	5.866	1.00	0.00
ATOM 981	1HH1	ARG	A	70	161.731	5.474	9.181	1.00	0.00
ATOM 982	2HH1	ARG	A	70	163.347	5.210	9.744	1.00	0.00
ATOM 983	1HH2	ARG	A	70	164.825	5.624	6.604	1.00	0.00
ATOM 984	2HH2	ARG	A	70	165.104	5.296	8.282	1.00	0.00
ATOM 985	N	TYR	A	71	157.354	7.415	3.953	1.00	0.00

ATOM 986	CA	TYR A	71	156.182	8.156	4.406	1.00	0.00
ATOM 987	C	TYR A	71	155.796	7.749	5.824	1.00	0.00
ATOM 988	O	TYR A	71	155.470	8.595	6.657	1.00	0.00
ATOM 989	CB	TYR A	71	155.007	7.920	3.457	1.00	0.00
ATOM 990	CG	TYR A	71	155.195	8.551	2.094	1.00	0.00
ATOM 991	CD1	TYR A	71	155.167	9.930	1.937	1.00	0.00
ATOM 992	CD2	TYR A	71	155.397	7.766	0.966	1.00	0.00
ATOM 993	CE1	TYR A	71	155.337	10.510	0.693	1.00	0.00
ATOM 994	CE2	TYR A	71	155.568	8.337	-0.280	1.00	0.00
ATOM 995	CZ	TYR A	71	155.537	9.710	-0.411	1.00	0.00
ATOM 996	OH	TYR A	71	155.707	10.284	-1.650	1.00	0.00
ATOM 997	H	TYR A	71	157.249	6.486	3.661	1.00	0.00
ATOM 998	HA	TYR A	71	156.432	9.207	4.401	1.00	0.00
ATOM 999	1HB	TYR A	71	154.875	6.859	3.315	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.111	8.336	3.895	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.010	10.555	2.804	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.420	6.691	1.071	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.313	11.585	0.592	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.725	7.710	-1.145	1.00	0.00
ATOM 1005	HH	TYR A	71	156.632	10.235	-1.902	1.00	0.00
ATOM 1006	N	PHE A	72	155.835	6.447	6.092	1.00	0.00
ATOM 1007	CA	PHE A	72	155.488	5.928	7.409	1.00	0.00
ATOM 1008	C	PHE A	72	156.491	4.871	7.858	1.00	0.00
ATOM 1009	O	PHE A	72	157.311	4.403	7.068	1.00	0.00
ATOM 1010	CB	PHE A	72	154.079	5.335	7.393	1.00	0.00
ATOM 1011	CG	PHE A	72	153.863	4.329	6.298	1.00	0.00
ATOM 1012	CD1	PHE A	72	154.015	2.974	6.546	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.508	4.738	5.023	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.817	2.046	5.541	1.00	0.00

ATOM 1015	CE2	PHE	A	72	153.309	3.816	4.015	1.00	0.00
ATOM 1016	CZ	PHE	A	72	153.463	2.468	4.274	1.00	0.00
ATOM 1017	H	PHE	A	72	156.102	5.823	5.386	1.00	0.00
ATOM 1018	HA	PHE	A	72	155.514	6.751	8.107	1.00	0.00
ATOM 1019	1HB	PHE	A	72	153.890	4.844	8.336	1.00	0.00
ATOM 1020	2HB	PHE	A	72	153.361	6.132	7.260	1.00	0.00
ATOM 1021	HD1	PHE	A	72	154.290	2.644	7.537	1.00	0.00
ATOM 1022	HD2	PHE	A	72	153.387	5.793	4.820	1.00	0.00
ATOM 1023	HE1	PHE	A	72	153.939	0.993	5.746	1.00	0.00
ATOM 1024	HE2	PHE	A	72	153.033	4.148	3.024	1.00	0.00
ATOM 1025	HZ	PHE	A	72	153.308	1.744	3.487	1.00	0.00
ATOM 1026	N	THR	A	73	156.422	4.500	9.133	1.00	0.00
ATOM 1027	CA	THR	A	73	157.326	3.498	9.688	1.00	0.00
ATOM 1028	C	THR	A	73	156.594	2.182	9.932	1.00	0.00
ATOM 1029	O	THR	A	73	155.767	2.079	10.838	1.00	0.00
ATOM 1030	CB	THR	A	73	157.941	4.003	10.993	1.00	0.00
ATOM 1031	OG1	THR	A	73	156.941	4.531	11.848	1.00	0.00
ATOM 1032	CG2	THR	A	73	158.983	5.080	10.785	1.00	0.00
ATOM 1033	H	THR	A	73	155.748	4.909	9.714	1.00	0.00
ATOM 1034	HA	THR	A	73	158.114	3.329	8.970	1.00	0.00
ATOM 1035	HB	THR	A	73	158.417	3.176	11.499	1.00	0.00
ATOM 1036	HG1	THR	A	73	156.596	5.344	11.472	1.00	0.00
ATOM 1037	1HG2	THR	A	73	159.375	5.392	11.742	1.00	0.00
ATOM 1038	2HG2	THR	A	73	158.532	5.927	10.289	1.00	0.00
ATOM 1039	3HG2	THR	A	73	159.786	4.692	10.177	1.00	0.00
ATOM 1040	N	CYS	A	74	156.905	1.178	9.118	1.00	0.00
ATOM 1041	CA	CYS	A	74	156.276	-0.132	9.247	1.00	0.00
ATOM 1042	C	CYS	A	74	157.327	-1.238	9.278	1.00	0.00
ATOM 1043	O	CYS	A	74	158.514	-0.986	9.073	1.00	0.00

ATOM 1044	CB	CYS A	74	155.305	-0.369	8.090	1.00	0.00
ATOM 1045	SG	CYS A	74	153.619	0.197	8.415	1.00	0.00
ATOM 1046	H	CYS A	74	157.572	1.322	8.415	1.00	0.00
ATOM 1047	HA	CYS A	74	155.727	-0.147	10.176	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.662	0.153	7.215	1.00	0.00
ATOM 1049	2HB	CYS A	74	155.261	-1.428	7.877	1.00	0.00
ATOM 1050	HG	CYS A	74	153.098	0.048	7.623	1.00	0.00
ATOM 1051	N	ALA A	75	156.880	-2.462	9.536	1.00	0.00
ATOM 1052	CA	ALA A	75	157.781	-3.607	9.595	1.00	0.00
ATOM 1053	C	ALA A	75	158.466	-3.836	8.251	1.00	0.00
ATOM 1054	O	ALA A	75	158.120	-3.206	7.251	1.00	0.00
ATOM 1055	CB	ALA A	75	157.022	-4.854	10.021	1.00	0.00
ATOM 1056	H	ALA A	75	155.923	-2.600	9.691	1.00	0.00
ATOM 1057	HA	ALA A	75	158.535	-3.401	10.341	1.00	0.00
ATOM 1058	1HB	ALA A	75	156.775	-5.441	9.149	1.00	0.00
ATOM 1059	2HB	ALA A	75	156.113	-4.566	10.529	1.00	0.00
ATOM 1060	3HB	ALA A	75	157.636	-5.441	10.687	1.00	0.00
ATOM 1061	N	LEU A	76	159.440	-4.741	8.235	1.00	0.00
ATOM 1062	CA	LEU A	76	160.174	-5.052	7.014	1.00	0.00
ATOM 1063	C	LEU A	76	159.372	-5.997	6.124	1.00	0.00
ATOM 1064	O	LEU A	76	158.793	-6.973	6.600	1.00	0.00
ATOM 1065	CB	LEU A	76	161.527	-5.679	7.353	1.00	0.00
ATOM 1066	CG	LEU A	76	162.600	-4.692	7.818	1.00	0.00
ATOM 1067	CD1	LEU A	76	163.504	-5.337	8.856	1.00	0.00
ATOM 1068	CD2	LEU A	76	163.415	-4.197	6.633	1.00	0.00
ATOM 1069	H	LEU A	76	159.671	-5.210	9.064	1.00	0.00
ATOM 1070	HA	LEU A	76	160.339	-4.129	6.482	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.376	-6.410	8.135	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.895	-6.189	6.475	1.00	0.00



ATOM 1073	HG	LEU A	76	162.121	-3.839	8.276	1.00	0.00
ATOM 1074	1HD1	LEU A	76	163.112	-5.145	9.844	1.00	0.00
ATOM 1075	2HD1	LEU A	76	164.497	-4.919	8.777	1.00	0.00
ATOM 1076	3HD1	LEU A	76	163.547	-6.401	8.686	1.00	0.00
ATOM 1077	1HD2	LEU A	76	163.394	-4.936	5.846	1.00	0.00
ATOM 1078	2HD2	LEU A	76	164.436	-4.028	6.943	1.00	0.00
ATOM 1079	3HD2	LEU A	76	162.993	-3.271	6.267	1.00	0.00
ATOM 1080	N	LYS A	77	159.343	-5.699	4.829	1.00	0.00
ATOM 1081	CA	LYS A	77	158.612	-6.522	3.872	1.00	0.00
ATOM 1082	C	LYS A	77	157.123	-6.548	4.201	1.00	0.00
ATOM 1083	O	LYS A	77	156.500	-7.610	4.224	1.00	0.00
ATOM 1084	CB	LYS A	77	159.172	-7.946	3.859	1.00	0.00
ATOM 1085	CG	LYS A	77	160.683	-8.006	3.706	1.00	0.00
ATOM 1086	CD	LYS A	77	161.119	-7.581	2.314	1.00	0.00
ATOM 1087	CE	LYS A	77	162.513	-6.976	2.326	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.560	-7.995	2.614	1.00	0.00
ATOM 1089	H	LYS A	77	159.825	-4.908	4.510	1.00	0.00
ATOM 1090	HA	LYS A	77	158.744	-6.086	2.892	1.00	0.00
ATOM 1091	1HB	LYS A	77	158.907	-8.433	4.787	1.00	0.00
ATOM 1092	2HB	LYS A	77	158.728	-8.489	3.038	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.135	-7.344	4.431	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.014	-9.018	3.886	1.00	0.00
ATOM 1095	1HD	LYS A	77	161.120	-8.447	1.668	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.421	-6.849	1.936	1.00	0.00
ATOM 1097	1HE	LYS A	77	162.708	-6.535	1.361	1.00	0.00
ATOM 1098	2HE	LYS A	77	162.552	-6.209	3.086	1.00	0.00
ATOM 1099	1HZ	LYS A	77	163.525	-8.270	3.616	1.00	0.00
ATOM 1100	2HZ	LYS A	77	164.502	-7.610	2.403	1.00	0.00
ATOM 1101	3HZ	LYS A	77	163.404	-8.841	2.028	1.00	0.00

ATOM 1102	N	LYS A	78	156.558	-5.373	4.456	1.00	0.00
ATOM 1103	CA	LYS A	78	155.142	-5.261	4.785	1.00	0.00
ATOM 1104	C	LYS A	78	154.602	-3.885	4.407	1.00	0.00
ATOM 1105	O	LYS A	78	153.781	-3.312	5.123	1.00	0.00
ATOM 1106	CB	LYS A	78	154.921	-5.517	6.278	1.00	0.00
ATOM 1107	CG	LYS A	78	155.477	-6.850	6.755	1.00	0.00
ATOM 1108	CD	LYS A	78	155.149	-7.097	8.218	1.00	0.00
ATOM 1109	CE	LYS A	78	153.954	-8.023	8.373	1.00	0.00
ATOM 1110	NZ	LYS A	78	153.139	-7.684	9.573	1.00	0.00
ATOM 1111	H	LYS A	78	157.106	-4.561	4.423	1.00	0.00
ATOM 1112	HA	LYS A	78	154.610	-6.012	4.219	1.00	0.00
ATOM 1113	1HB	LYS A	78	155.400	-4.729	6.840	1.00	0.00
ATOM 1114	2HB	LYS A	78	153.861	-5.500	6.482	1.00	0.00
ATOM 1115	1HG	LYS A	78	155.046	-7.641	6.161	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.550	-6.845	6.631	1.00	0.00
ATOM 1117	1HD	LYS A	78	156.005	-7.550	8.697	1.00	0.00
ATOM 1118	2HD	LYS A	78	154.926	-6.152	8.692	1.00	0.00
ATOM 1119	1HE	LYS A	78	153.332	-7.938	7.493	1.00	0.00
ATOM 1120	2HE	LYS A	78	154.309	-9.038	8.464	1.00	0.00
ATOM 1121	1HZ	LYS A	78	152.325	-8.326	9.645	1.00	0.00
ATOM 1122	2HZ	LYS A	78	152.792	-6.707	9.505	1.00	0.00
ATOM 1123	3HZ	LYS A	78	153.716	-7.775	10.433	1.00	0.00
ATOM 1124	N	ALA A	79	155.068	-3.363	3.278	1.00	0.00
ATOM 1125	CA	ALA A	79	154.633	-2.055	2.805	1.00	0.00
ATOM 1126	C	ALA A	79	154.555	-2.020	1.282	1.00	0.00
ATOM 1127	O	ALA A	79	155.578	-1.989	0.599	1.00	0.00
ATOM 1128	CB	ALA A	79	155.571	-0.971	3.312	1.00	0.00
ATOM 1129	H	ALA A	79	155.721	-3.869	2.751	1.00	0.00
ATOM 1130	HA	ALA A	79	153.648	-1.864	3.209	1.00	0.00

ATOM 1131	1HB	ALA	A	79	156.010	-1.283	4.248	1.00	0.00
ATOM 1132	2HB	ALA	A	79	155.017	-0.056	3.462	1.00	0.00
ATOM 1133	3HB	ALA	A	79	156.353	-0.802	2.586	1.00	0.00
ATOM 1134	N	LEU	A	80	153.334	-2.025	0.757	1.00	0.00
ATOM 1135	CA	LEU	A	80	153.122	-1.994	-0.685	1.00	0.00
ATOM 1136	C	LEU	A	80	152.248	-0.809	-1.081	1.00	0.00
ATOM 1137	O	LEU	A	80	151.047	-0.791	-0.810	1.00	0.00
ATOM 1138	CB	LEU	A	80	152.476	-3.299	-1.154	1.00	0.00
ATOM 1139	CG	LEU	A	80	152.145	-3.358	-2.647	1.00	0.00
ATOM 1140	CD1	LEU	A	80	153.393	-3.669	-3.458	1.00	0.00
ATOM 1141	CD2	LEU	A	80	151.062	-4.394	-2.911	1.00	0.00
ATOM 1142	H	LEU	A	80	152.557	-2.050	1.353	1.00	0.00
ATOM 1143	HA	LEU	A	80	154.086	-1.889	-1.160	1.00	0.00
ATOM 1144	1HB	LEU	A	80	153.147	-4.113	-0.923	1.00	0.00
ATOM 1145	2HB	LEU	A	80	151.559	-3.442	-0.600	1.00	0.00
ATOM 1146	HG	LEU	A	80	151.772	-2.395	-2.964	1.00	0.00
ATOM 1147	1HD1	LEU	A	80	153.335	-3.169	-4.413	1.00	0.00
ATOM 1148	2HD1	LEU	A	80	153.464	-4.735	-3.614	1.00	0.00
ATOM 1149	3HD1	LEU	A	80	154.265	-3.325	-2.923	1.00	0.00
ATOM 1150	1HD2	LEU	A	80	150.263	-4.270	-2.196	1.00	0.00
ATOM 1151	2HD2	LEU	A	80	151.481	-5.385	-2.814	1.00	0.00
ATOM 1152	3HD2	LEU	A	80	150.675	-4.263	-3.911	1.00	0.00
ATOM 1153	N	PHE	A	81	152.858	0.182	-1.724	1.00	0.00
ATOM 1154	CA	PHE	A	81	152.135	1.371	-2.158	1.00	0.00
ATOM 1155	C	PHE	A	81	151.374	1.103	-3.452	1.00	0.00
ATOM 1156	O	PHE	A	81	151.879	0.436	-4.355	1.00	0.00
ATOM 1157	CB	PHE	A	81	153.104	2.538	-2.355	1.00	0.00
ATOM 1158	CG	PHE	A	81	153.883	2.888	-1.119	1.00	0.00
ATOM 1159	CD1	PHE	A	81	153.494	3.947	-0.316	1.00	0.00

ATOM 1160	CD2	PHE A	81	155.005	2.157	-0.761	1.00	0.00
ATOM 1161	CE1	PHE A	81	154.209	4.271	0.822	1.00	0.00
ATOM 1162	CE2	PHE A	81	155.724	2.476	0.375	1.00	0.00
ATOM 1163	CZ	PHE A	81	155.325	3.534	1.167	1.00	0.00
ATOM 1164	H	PHE A	81	153.817	0.110	-1.911	1.00	0.00
ATOM 1165	HA	PHE A	81	151.428	1.630	-1.385	1.00	0.00
ATOM 1166	1HB	PHE A	81	153.810	2.283	-3.131	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.546	3.414	-2.656	1.00	0.00
ATOM 1168	HD1	PHE A	81	152.621	4.524	-0.585	1.00	0.00
ATOM 1169	HD2	PHE A	81	155.317	1.329	-1.381	1.00	0.00
ATOM 1170	HE1	PHE A	81	153.895	5.100	1.440	1.00	0.00
ATOM 1171	HE2	PHE A	81	156.596	1.898	0.643	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.884	3.785	2.056	1.00	0.00
ATOM 1173	N	VAL A	82	150.155	1.628	-3.535	1.00	0.00
ATOM 1174	CA	VAL A	82	149.324	1.445	-4.718	1.00	0.00
ATOM 1175	C	VAL A	82	148.369	2.618	-4.907	1.00	0.00
ATOM 1176	O	VAL A	82	148.190	3.437	-4.005	1.00	0.00
ATOM 1177	CB	VAL A	82	148.507	0.142	-4.635	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.423	-1.069	-4.717	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.682	0.111	-3.358	1.00	0.00
ATOM 1180	H	VAL A	82	149.807	2.151	-2.782	1.00	0.00
ATOM 1181	HA	VAL A	82	149.976	1.382	-5.577	1.00	0.00
ATOM 1182	HB	VAL A	82	147.830	0.111	-5.477	1.00	0.00
ATOM 1183	1HG1	VAL A	82	150.197	-0.886	-5.447	1.00	0.00
ATOM 1184	2HG1	VAL A	82	148.848	-1.936	-5.010	1.00	0.00
ATOM 1185	3HG1	VAL A	82	149.873	-1.247	-3.751	1.00	0.00
ATOM 1186	1HG2	VAL A	82	147.413	1.118	-3.078	1.00	0.00
ATOM 1187	2HG2	VAL A	82	148.261	-0.341	-2.566	1.00	0.00
ATOM 1188	3HG2	VAL A	82	146.784	-0.468	-3.523	1.00	0.00

ATOM 1189	N	LYS A	83	147.757	2.694	-6.084	1.00	0.00
ATOM 1190	CA	LYS A	83	146.820	3.768	-6.391	1.00	0.00
ATOM 1191	C	LYS A	83	145.576	3.672	-5.515	1.00	0.00
ATOM 1192	O	LYS A	83	144.875	2.659	-5.521	1.00	0.00
ATOM 1193	CB	LYS A	83	146.424	3.721	-7.868	1.00	0.00
ATOM 1194	CG	LYS A	83	147.590	3.945	-8.818	1.00	0.00
ATOM 1195	CD	LYS A	83	147.222	3.577	-10.246	1.00	0.00
ATOM 1196	CE	LYS A	83	147.832	4.546	-11.246	1.00	0.00
ATOM 1197	NZ	LYS A	83	148.273	3.859	-12.490	1.00	0.00
ATOM 1198	H	LYS A	83	147.941	2.011	-6.763	1.00	0.00
ATOM 1199	HA	LYS A	83	147.313	4.707	-6.190	1.00	0.00
ATOM 1200	1HB	LYS A	83	145.993	2.754	-8.081	1.00	0.00
ATOM 1201	2HB	LYS A	83	145.684	4.484	-8.054	1.00	0.00
ATOM 1202	1HG	LYS A	83	147.871	4.986	-8.786	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.421	3.334	-8.500	1.00	0.00
ATOM 1204	1HD	LYS A	83	147.587	2.583	-10.456	1.00	0.00
ATOM 1205	2HD	LYS A	83	146.147	3.598	-10.349	1.00	0.00
ATOM 1206	1HE	LYS A	83	147.095	5.293	-11.500	1.00	0.00
ATOM 1207	2HE	LYS A	83	148.686	5.025	-10.788	1.00	0.00
ATOM 1208	1HZ	LYS A	83	149.279	3.605	-12.422	1.00	0.00
ATOM 1209	2HZ	LYS A	83	148.139	4.483	-13.310	1.00	0.00
ATOM 1210	3HZ	LYS A	83	147.717	2.991	-12.635	1.00	0.00
ATOM 1211	N	LEU A	84	145.307	4.735	-4.765	1.00	0.00
ATOM 1212	CA	LEU A	84	144.147	4.776	-3.883	1.00	0.00
ATOM 1213	C	LEU A	84	142.855	4.587	-4.673	1.00	0.00
ATOM 1214	O	LEU A	84	141.893	4.002	-4.176	1.00	0.00
ATOM 1215	CB	LEU A	84	144.108	6.105	-3.127	1.00	0.00
ATOM 1216	CG	LEU A	84	142.878	6.316	-2.242	1.00	0.00
ATOM 1217	CD1	LEU A	84	143.016	5.538	-0.942	1.00	0.00

ATOM 1218	CD2	LEU A	84	142.672	7.795	-1.961	1.00	0.00
ATOM 1219	H	LEU A	84	145.903	5.510	-4.806	1.00	0.00
ATOM 1220	HA	LEU A	84	144.242	3.970	-3.172	1.00	0.00
ATOM 1221	1HB	LEU A	84	144.989	6.165	-2.504	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.145	6.906	-3.849	1.00	0.00
ATOM 1223	HG	LEU A	84	142.004	5.947	-2.760	1.00	0.00
ATOM 1224	1HD1	LEU A	84	142.131	5.683	-0.340	1.00	0.00
ATOM 1225	2HD1	LEU A	84	143.882	5.890	-0.401	1.00	0.00
ATOM 1226	3HD1	LEU A	84	143.134	4.486	-1.162	1.00	0.00
ATOM 1227	1HD2	LEU A	84	141.827	7.923	-1.300	1.00	0.00
ATOM 1228	2HD2	LEU A	84	142.485	8.316	-2.887	1.00	0.00
ATOM 1229	3HD2	LEU A	84	143.558	8.200	-1.493	1.00	0.00
ATOM 1230	N	LYS A	85	142.843	5.085	-5.904	1.00	0.00
ATOM 1231	CA	LYS A	85	141.670	4.971	-6.764	1.00	0.00
ATOM 1232	C	LYS A	85	141.371	3.510	-7.086	1.00	0.00
ATOM 1233	O	LYS A	85	140.226	3.147	-7.355	1.00	0.00
ATOM 1234	CB	LYS A	85	141.882	5.757	-8.059	1.00	0.00
ATOM 1235	CG	LYS A	85	143.234	5.509	-8.708	1.00	0.00
ATOM 1236	CD	LYS A	85	144.209	6.639	-8.416	1.00	0.00
ATOM 1237	CE	LYS A	85	145.050	6.980	-9.635	1.00	0.00
ATOM 1238	NZ	LYS A	85	145.823	8.237	-9.443	1.00	0.00
ATOM 1239	H	LYS A	85	143.642	5.540	-6.244	1.00	0.00
ATOM 1240	HA	LYS A	85	140.829	5.389	-6.232	1.00	0.00
ATOM 1241	1HB	LYS A	85	141.112	5.481	-8.764	1.00	0.00
ATOM 1242	2HB	LYS A	85	141.798	6.812	-7.842	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.642	4.587	-8.325	1.00	0.00
ATOM 1244	2HG	LYS A	85	143.099	5.429	-9.776	1.00	0.00
ATOM 1245	1HD	LYS A	85	143.653	7.515	-8.119	1.00	0.00
ATOM 1246	2HD	LYS A	85	144.863	6.336	-7.611	1.00	0.00

ATOM 1247	1HE	LYS A	85	145.739	6.169	-9.820	1.00	0.00
ATOM 1248	2HE	LYS A	85	144.396	7.096	-10.487	1.00	0.00
ATOM 1249	1HZ	LYS A	85	145.341	8.853	-8.758	1.00	0.00
ATOM 1250	2HZ	LYS A	85	145.911	8.745	-10.346	1.00	0.00
ATOM 1251	3HZ	LYS A	85	146.777	8.020	-9.087	1.00	0.00
ATOM 1252	N	SER A	86	142.405	2.675	-7.058	1.00	0.00
ATOM 1253	CA	SER A	86	142.248	1.255	-7.348	1.00	0.00
ATOM 1254	C	SER A	86	142.150	0.442	-6.061	1.00	0.00
ATOM 1255	O	SER A	86	142.547	-0.722	-6.017	1.00	0.00
ATOM 1256	CB	SER A	86	143.421	0.752	-8.193	1.00	0.00
ATOM 1257	OG	SER A	86	143.705	1.648	-9.254	1.00	0.00
ATOM 1258	H	SER A	86	143.295	3.023	-6.838	1.00	0.00
ATOM 1259	HA	SER A	86	141.334	1.130	-7.908	1.00	0.00
ATOM 1260	1HB	SER A	86	144.298	0.663	-7.569	1.00	0.00
ATOM 1261	2HB	SER A	86	143.176	-0.214	-8.608	1.00	0.00
ATOM 1262	HG	SER A	86	144.344	1.247	-9.848	1.00	0.00
ATOM 1263	N	CYS A	87	141.618	1.064	-5.012	1.00	0.00
ATOM 1264	CA	CYS A	87	141.467	0.398	-3.724	1.00	0.00
ATOM 1265	C	CYS A	87	139.994	0.260	-3.353	1.00	0.00
ATOM 1266	O	CYS A	87	139.165	1.081	-3.747	1.00	0.00
ATOM 1267	CB	CYS A	87	142.207	1.175	-2.634	1.00	0.00
ATOM 1268	SG	CYS A	87	143.989	0.867	-2.590	1.00	0.00
ATOM 1269	H	CYS A	87	141.319	1.992	-5.108	1.00	0.00
ATOM 1270	HA	CYS A	87	141.898	-0.588	-3.808	1.00	0.00
ATOM 1271	1HB	CYS A	87	142.062	2.233	-2.795	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.802	0.904	-1.670	1.00	0.00
ATOM 1273	HG	CYS A	87	144.418	1.539	-3.125	1.00	0.00
ATOM 1274	N	ARG A	88	139.674	-0.783	-2.595	1.00	0.00
ATOM 1275	CA	ARG A	88	138.300	-1.027	-2.172	1.00	0.00

ATOM 1276	C	ARG A	88	138.226	-1.247	-0.662	1.00	0.00
ATOM 1277	O	ARG A	88	139.134	-1.828	-0.067	1.00	0.00
ATOM 1278	CB	ARG A	88	137.728	-2.243	-2.903	1.00	0.00
ATOM 1279	CG	ARG A	88	137.135	-1.911	-4.264	1.00	0.00
ATOM 1280	CD	ARG A	88	135.620	-1.785	-4.199	1.00	0.00
ATOM 1281	NE	ARG A	88	135.175	-0.413	-4.428	1.00	0.00
ATOM 1282	CZ	ARG A	88	135.192	0.183	-5.618	1.00	0.00
ATOM 1283	NH1	ARG A	88	135.631	-0.468	-6.688	1.00	0.00
ATOM 1284	NH2	ARG A	88	134.768	1.433	-5.740	1.00	0.00
ATOM 1285	H	ARG A	88	140.378	-1.403	-2.312	1.00	0.00
ATOM 1286	HA	ARG A	88	137.715	-0.156	-2.427	1.00	0.00
ATOM 1287	1HB	ARG A	88	138.517	-2.967	-3.046	1.00	0.00
ATOM 1288	2HB	ARG A	88	136.953	-2.684	-2.294	1.00	0.00
ATOM 1289	1HG	ARG A	88	137.549	-0.974	-4.607	1.00	0.00
ATOM 1290	2HG	ARG A	88	137.392	-2.697	-4.958	1.00	0.00
ATOM 1291	1HD	ARG A	88	135.186	-2.424	-4.953	1.00	0.00
ATOM 1292	2HD	ARG A	88	135.285	-2.103	-3.222	1.00	0.00
ATOM 1293	HE	ARG A	88	134.846	0.092	-3.655	1.00	0.00
ATOM 1294	1HH1	ARG A	88	135.952	-1.412	-6.603	1.00	0.00
ATOM 1295	2HH1	ARG A	88	135.640	-0.016	-7.580	1.00	0.00
ATOM 1296	1HH2	ARG A	88	134.436	1.929	-4.938	1.00	0.00
ATOM 1297	2HH2	ARG A	88	134.780	1.881	-6.634	1.00	0.00
ATOM 1298	N	PRO A	89	137.138	-0.787	-0.019	1.00	0.00
ATOM 1299	CA	PRO A	89	136.954	-0.940	1.428	1.00	0.00
ATOM 1300	C	PRO A	89	137.091	-2.390	1.877	1.00	0.00
ATOM 1301	O	PRO A	89	136.444	-3.284	1.330	1.00	0.00
ATOM 1302	CB	PRO A	89	135.526	-0.441	1.664	1.00	0.00
ATOM 1303	CG	PRO A	89	135.249	0.476	0.523	1.00	0.00
ATOM 1304	CD	PRO A	89	136.005	-0.084	-0.649	1.00	0.00



ATOM 1305	HA	PRO A	89	137.650	-0.326	1.981	1.00	0.00
ATOM 1306	1HB	PRO A	89	134.846	-1.280	1.672	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.476	0.079	2.609	1.00	0.00
ATOM 1308	1HG	PRO A	89	134.189	0.491	0.314	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.602	1.469	0.758	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.384	-0.771	-1.205	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.354	0.714	-1.288	1.00	0.00
ATOM 1312	N	ASP A	90	137.937	-2.618	2.876	1.00	0.00
ATOM 1313	CA	ASP A	90	138.157	-3.961	3.398	1.00	0.00
ATOM 1314	C	ASP A	90	137.366	-4.181	4.683	1.00	0.00
ATOM 1315	O	ASP A	90	137.759	-3.716	5.754	1.00	0.00
ATOM 1316	CB	ASP A	90	139.647	-4.192	3.658	1.00	0.00
ATOM 1317	CG	ASP A	90	140.036	-5.653	3.537	1.00	0.00
ATOM 1318	OD1	ASP A	90	140.335	-6.275	4.578	1.00	0.00
ATOM 1319	OD2	ASP A	90	140.041	-6.174	2.403	1.00	0.00
ATOM 1320	H	ASP A	90	138.424	-1.866	3.271	1.00	0.00
ATOM 1321	HA	ASP A	90	137.817	-4.667	2.655	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.223	-3.626	2.941	1.00	0.00
ATOM 1323	2HB	ASP A	90	139.889	-3.855	4.654	1.00	0.00
ATOM 1324	N	SER A	91	136.249	-4.893	4.571	1.00	0.00
ATOM 1325	CA	SER A	91	135.403	-5.173	5.725	1.00	0.00
ATOM 1326	C	SER A	91	135.694	-6.560	6.292	1.00	0.00
ATOM 1327	O	SER A	91	134.834	-7.177	6.920	1.00	0.00
ATOM 1328	CB	SER A	91	133.928	-5.070	5.339	1.00	0.00
ATOM 1329	OG	SER A	91	133.139	-4.656	6.440	1.00	0.00
ATOM 1330	H	SER A	91	135.988	-5.237	3.691	1.00	0.00
ATOM 1331	HA	SER A	91	135.620	-4.435	6.482	1.00	0.00
ATOM 1332	1HB	SER A	91	133.815	-4.351	4.541	1.00	0.00
ATOM 1333	2HB	SER A	91	133.577	-6.036	5.005	1.00	0.00

ATOM 1334	HG	SER A	91	132.431	-5.288	6.584	1.00	0.00
ATOM 1335	N	ARG A	92	136.912	-7.045	6.069	1.00	0.00
ATOM 1336	CA	ARG A	92	137.312	-8.358	6.561	1.00	0.00
ATOM 1337	C	ARG A	92	137.327	-8.385	8.086	1.00	0.00
ATOM 1338	O	ARG A	92	137.097	-9.426	8.702	1.00	0.00
ATOM 1339	CB	ARG A	92	138.693	-8.731	6.019	1.00	0.00
ATOM 1340	CG	ARG A	92	138.670	-9.221	4.580	1.00	0.00
ATOM 1341	CD	ARG A	92	137.825	-10.475	4.432	1.00	0.00
ATOM 1342	NE	ARG A	92	136.492	-10.179	3.911	1.00	0.00
ATOM 1343	CZ	ARG A	92	136.232	-9.956	2.624	1.00	0.00
ATOM 1344	NH1	ARG A	92	137.209	-9.994	1.726	1.00	0.00
ATOM 1345	NH2	ARG A	92	134.992	-9.695	2.235	1.00	0.00
ATOM 1346	H	ARG A	92	137.557	-6.509	5.564	1.00	0.00
ATOM 1347	HA	ARG A	92	136.589	-9.078	6.208	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.334	-7.863	6.072	1.00	0.00
ATOM 1349	2HB	ARG A	92	139.110	-9.513	6.636	1.00	0.00
ATOM 1350	1HG	ARG A	92	138.257	-8.444	3.953	1.00	0.00
ATOM 1351	2HG	ARG A	92	139.681	-9.438	4.269	1.00	0.00
ATOM 1352	1HD	ARG A	92	138.324	-11.152	3.755	1.00	0.00
ATOM 1353	2HD	ARG A	92	137.726	-10.944	5.400	1.00	0.00
ATOM 1354	HE	ARG A	92	135.752	-10.145	4.552	1.00	0.00
ATOM 1355	1HH1	ARG A	92	138.147	-10.191	2.013	1.00	0.00
ATOM 1356	2HH1	ARG A	92	137.007	-9.826	0.761	1.00	0.00
ATOM 1357	1HH2	ARG A	92	134.252	-9.666	2.907	1.00	0.00
ATOM 1358	2HH2	ARG A	92	134.796	-9.528	1.268	1.00	0.00
ATOM 1359	N	PHE A	93	137.598	-7.232	8.690	1.00	0.00
ATOM 1360	CA	PHE A	93	137.643	-7.121	10.144	1.00	0.00
ATOM 1361	C	PHE A	93	136.506	-6.246	10.661	1.00	0.00
ATOM 1362	O	PHE A	93	136.622	-5.622	11.715	1.00	0.00

ATOM 1363	CB	PHE A	93	138.988	-6.547	10.591	1.00	0.00
ATOM 1364	CG	PHE A	93	140.161	-7.413	10.229	1.00	0.00
ATOM 1365	CD1	PHE A	93	140.944	-7.988	11.217	1.00	0.00
ATOM 1366	CD2	PHE A	93	140.480	-7.652	8.903	1.00	0.00
ATOM 1367	CE1	PHE A	93	142.023	-8.787	10.889	1.00	0.00
ATOM 1368	CE2	PHE A	93	141.558	-8.449	8.567	1.00	0.00
ATOM 1369	CZ	PHE A	93	142.331	-9.016	9.562	1.00	0.00
ATOM 1370	H	PHE A	93	137.773	-6.436	8.146	1.00	0.00
ATOM 1371	HA	PHE A	93	137.532	-8.114	10.555	1.00	0.00
ATOM 1372	1HB	PHE A	93	139.132	-5.582	10.125	1.00	0.00
ATOM 1373	2HB	PHE A	93	138.981	-6.425	11.664	1.00	0.00
ATOM 1374	HD1	PHE A	93	140.704	-7.809	12.255	1.00	0.00
ATOM 1375	HD2	PHE A	93	139.877	-7.208	8.124	1.00	0.00
ATOM 1376	HE1	PHE A	93	142.625	-9.228	11.668	1.00	0.00
ATOM 1377	HE2	PHE A	93	141.797	-8.627	7.529	1.00	0.00
ATOM 1378	HZ	PHE A	93	143.175	-9.640	9.302	1.00	0.00
ATOM 1379	N	ALA A	94	135.407	-6.203	9.912	1.00	0.00
ATOM 1380	CA	ALA A	94	134.252	-5.403	10.300	1.00	0.00
ATOM 1381	C	ALA A	94	133.515	-6.036	11.474	1.00	0.00
ATOM 1382	O	ALA A	94	133.186	-7.221	11.448	1.00	0.00
ATOM 1383	CB	ALA A	94	133.311	-5.227	9.116	1.00	0.00
ATOM 1384	H	ALA A	94	135.373	-6.721	9.081	1.00	0.00
ATOM 1385	HA	ALA A	94	134.607	-4.426	10.594	1.00	0.00
ATOM 1386	1HB	ALA A	94	133.533	-4.295	8.616	1.00	0.00
ATOM 1387	2HB	ALA A	94	132.291	-5.213	9.466	1.00	0.00
ATOM 1388	3HB	ALA A	94	133.444	-6.047	8.426	1.00	0.00
ATOM 1389	N	SER A	95	133.257	-5.236	12.504	1.00	0.00
ATOM 1390	CA	SER A	95	132.557	-5.717	13.689	1.00	0.00
ATOM 1391	C	SER A	95	131.078	-5.939	13.396	1.00	0.00

ATOM 1392	O	SER A	95	130.347	-4.997	13.093	1.00	0.00
ATOM 1393	CB	SER A	95	132.718	-4.723	14.840	1.00	0.00
ATOM 1394	OG	SER A	95	134.071	-4.626	15.247	1.00	0.00
ATOM 1395	H	SER A	95	133.544	-4.299	12.466	1.00	0.00
ATOM 1396	HA	SER A	95	133.001	-6.659	13.975	1.00	0.00
ATOM 1397	1HB	SER A	95	132.379	-3.748	14.522	1.00	0.00
ATOM 1398	2HB	SER A	95	132.124	-5.052	15.682	1.00	0.00
ATOM 1399	HG	SER A	95	134.111	-4.383	16.175	1.00	0.00
ATOM 1400	N	LEU A	96	130.643	-7.192	13.488	1.00	0.00
ATOM 1401	CA	LEU A	96	129.250	-7.537	13.233	1.00	0.00
ATOM 1402	C	LEU A	96	128.828	-8.744	14.064	1.00	0.00
ATOM 1403	O	LEU A	96	128.824	-9.876	13.579	1.00	0.00
ATOM 1404	CB	LEU A	96	129.039	-7.830	11.746	1.00	0.00
ATOM 1405	CG	LEU A	96	128.713	-6.609	10.885	1.00	0.00
ATOM 1406	CD1	LEU A	96	129.040	-6.881	9.425	1.00	0.00
ATOM 1407	CD2	LEU A	96	127.249	-6.224	11.042	1.00	0.00
ATOM 1408	H	LEU A	96	131.274	-7.900	13.734	1.00	0.00
ATOM 1409	HA	LEU A	96	128.642	-6.691	13.513	1.00	0.00
ATOM 1410	1HB	LEU A	96	129.940	-8.286	11.359	1.00	0.00
ATOM 1411	2HB	LEU A	96	128.229	-8.537	11.650	1.00	0.00
ATOM 1412	HG	LEU A	96	129.316	-5.774	11.212	1.00	0.00
ATOM 1413	1HD1	LEU A	96	129.355	-5.964	8.950	1.00	0.00
ATOM 1414	2HD1	LEU A	96	128.163	-7.263	8.924	1.00	0.00
ATOM 1415	3HD1	LEU A	96	129.835	-7.609	9.364	1.00	0.00
ATOM 1416	1HD2	LEU A	96	126.884	-5.810	10.114	1.00	0.00
ATOM 1417	2HD2	LEU A	96	127.153	-5.488	11.828	1.00	0.00
ATOM 1418	3HD2	LEU A	96	126.672	-7.100	11.298	1.00	0.00
ATOM 1419	N	GLN A	97	128.471	-8.495	15.320	1.00	0.00
ATOM 1420	CA	GLN A	97	128.046	-9.560	16.220	1.00	0.00

ATOM 1421	C	GLN A	97	126.659	-9.272	16.790	1.00	0.00
ATOM 1422	O	GLN A	97	126.264	-8.114	16.928	1.00	0.00
ATOM 1423	CB	GLN A	97	129.053	-9.725	17.361	1.00	0.00
ATOM 1424	CG	GLN A	97	130.174	-10.704	17.045	1.00	0.00
ATOM 1425	CD	GLN A	97	130.874	-11.208	18.292	1.00	0.00
ATOM 1426	OE1	GLN A	97	130.231	-11.632	19.251	1.00	0.00
ATOM 1427	NE2	GLN A	97	132.201	-11.162	18.283	1.00	0.00
ATOM 1428	H	GLN A	97	128.494	-7.572	15.649	1.00	0.00
ATOM 1429	HA	GLN A	97	128.005	-10.478	15.653	1.00	0.00
ATOM 1430	1HB	GLN A	97	129.495	-8.764	17.578	1.00	0.00
ATOM 1431	2HB	GLN A	97	128.533	-10.079	18.238	1.00	0.00
ATOM 1432	1HG	GLN A	97	129.758	-11.550	16.518	1.00	0.00
ATOM 1433	2HG	GLN A	97	130.899	-10.209	16.417	1.00	0.00
ATOM 1434	1HE2	GLN A	97	132.647	-10.812	17.485	1.00	0.00
ATOM 1435	2HE2	GLN A	97	132.681	-11.482	19.076	1.00	0.00
ATOM 1436	N	PRO A	98	125.898	-10.327	17.129	1.00	0.00
ATOM 1437	CA	PRO A	98	124.549	-10.181	17.686	1.00	0.00
ATOM 1438	C	PRO A	98	124.566	-9.615	19.102	1.00	0.00
ATOM 1439	O	PRO A	98	125.628	-9.439	19.699	1.00	0.00
ATOM 1440	CB	PRO A	98	124.009	-11.613	17.690	1.00	0.00
ATOM 1441	CG	PRO A	98	125.221	-12.475	17.756	1.00	0.00
ATOM 1442	CD	PRO A	98	126.294	-11.743	16.998	1.00	0.00
ATOM 1443	HA	PRO A	98	123.928	-9.560	17.059	1.00	0.00
ATOM 1444	1HB	PRO A	98	123.372	-11.758	18.549	1.00	0.00
ATOM 1445	2HB	PRO A	98	123.448	-11.791	16.784	1.00	0.00
ATOM 1446	1HG	PRO A	98	125.517	-12.613	18.785	1.00	0.00
ATOM 1447	2HG	PRO A	98	125.019	-13.429	17.291	1.00	0.00
ATOM 1448	1HD	PRO A	98	127.259	-11.917	17.448	1.00	0.00
ATOM 1449	2HD	PRO A	98	126.297	-12.046	15.962	1.00	0.00

ATOM 1450	N	SER A	99	123.382	-9.331	19.634	1.00	0.00
ATOM 1451	CA	SER A	99	123.259	-8.784	20.981	1.00	0.00
ATOM 1452	C	SER A	99	122.426	-9.703	21.868	1.00	0.00
ATOM 1453	O	SER A	99	121.262	-9.977	21.575	1.00	0.00
ATOM 1454	CB	SER A	99	122.626	-7.392	20.932	1.00	0.00
ATOM 1455	OG	SER A	99	123.485	-6.463	20.292	1.00	0.00
ATOM 1456	H	SER A	99	122.570	-9.493	19.109	1.00	0.00
ATOM 1457	HA	SER A	99	124.252	-8.704	21.398	1.00	0.00
ATOM 1458	1HB	SER A	99	121.697	-7.440	20.385	1.00	0.00
ATOM 1459	2HB	SER A	99	122.434	-7.051	21.939	1.00	0.00
ATOM 1460	HG	SER A	99	123.508	-5.648	20.798	1.00	0.00
ATOM 1461	N	GLY A	100	123.030	-10.177	22.953	1.00	0.00
ATOM 1462	CA	GLY A	100	122.328	-11.060	23.866	1.00	0.00
ATOM 1463	C	GLY A	100	123.264	-11.750	24.840	1.00	0.00
ATOM 1464	O	GLY A	100	124.480	-11.744	24.645	1.00	0.00
ATOM 1465	H	GLY A	100	123.958	-9.925	23.135	1.00	0.00
ATOM 1466	1HA	GLY A	100	121.606	-10.483	24.424	1.00	0.00
ATOM 1467	2HA	GLY A	100	121.806	-11.811	23.292	1.00	0.00
ATOM 1468	N	PRO A	101	122.723	-12.361	25.909	1.00	0.00
ATOM 1469	CA	PRO A	101	123.532	-13.058	26.914	1.00	0.00
ATOM 1470	C	PRO A	101	124.481	-14.075	26.289	1.00	0.00
ATOM 1471	O	PRO A	101	124.058	-15.142	25.844	1.00	0.00
ATOM 1472	CB	PRO A	101	122.490	-13.764	27.784	1.00	0.00
ATOM 1473	CG	PRO A	101	121.251	-12.951	27.626	1.00	0.00
ATOM 1474	CD	PRO A	101	121.283	-12.419	26.220	1.00	0.00
ATOM 1475	HA	PRO A	101	124.098	-12.363	27.517	1.00	0.00
ATOM 1476	1HB	PRO A	101	122.347	-14.775	27.430	1.00	0.00
ATOM 1477	2HB	PRO A	101	122.824	-13.779	28.810	1.00	0.00
ATOM 1478	1HG	PRO A	101	120.382	-13.575	27.772	1.00	0.00

ATOM 1479	2HG	PRO A 101	121.254	-12.137	28.336	1.00	0.00
ATOM 1480	1HD	PRO A 101	120.770	-13.092	25.550	1.00	0.00
ATOM 1481	2HD	PRO A 101	120.841	-11.434	26.180	1.00	0.00
ATOM 1482	N	SER A 102	125.766	-13.737	26.259	1.00	0.00
ATOM 1483	CA	SER A 102	126.776	-14.621	25.688	1.00	0.00
ATOM 1484	C	SER A 102	128.162	-14.283	26.226	1.00	0.00
ATOM 1485	O	SER A 102	128.405	-13.168	26.686	1.00	0.00
ATOM 1486	CB	SER A 102	126.769	-14.520	24.162	1.00	0.00
ATOM 1487	OG	SER A 102	127.881	-15.196	23.599	1.00	0.00
ATOM 1488	H	SER A 102	126.042	-12.874	26.629	1.00	0.00
ATOM 1489	HA	SER A 102	126.528	-15.633	25.973	1.00	0.00
ATOM 1490	1HB	SER A 102	125.863	-14.962	23.776	1.00	0.00
ATOM 1491	2HB	SER A 102	126.812	-13.480	23.873	1.00	0.00
ATOM 1492	HG	SER A 102	128.175	-14.731	22.813	1.00	0.00
ATOM 1493	N	SER A 103	129.067	-15.254	26.164	1.00	0.00
ATOM 1494	CA	SER A 103	130.431	-15.060	26.645	1.00	0.00
ATOM 1495	C	SER A 103	131.329	-16.216	26.219	1.00	0.00
ATOM 1496	O	SER A 103	131.152	-17.349	26.666	1.00	0.00
ATOM 1497	CB	SER A 103	130.442	-14.924	28.169	1.00	0.00
ATOM 1498	OG	SER A 103	130.264	-16.183	28.794	1.00	0.00
ATOM 1499	H	SER A 103	128.814	-16.122	25.786	1.00	0.00
ATOM 1500	HA	SER A 103	130.808	-14.146	26.209	1.00	0.00
ATOM 1501	1HB	SER A 103	131.388	-14.510	28.485	1.00	0.00
ATOM 1502	2HB	SER A 103	129.641	-14.267	28.476	1.00	0.00
ATOM 1503	HG	SER A 103	129.437	-16.186	29.280	1.00	0.00
ATOM 1504	N	GLY A 104	132.292	-15.922	25.352	1.00	0.00
ATOM 1505	CA	GLY A 104	133.203	-16.947	24.880	1.00	0.00
ATOM 1506	C	GLY A 104	132.655	-17.708	23.689	1.00	0.00
ATOM 1507	O	GLY A 104	133.079	-17.416	22.551	1.00	0.00

ATOM 1508 OXT GLY A 104 131.800 -18.596 23.893 1.00 0.00  
ATOM 1509 H GLY A 104 132.385 -15.001 25.030 1.00 0.00  
ATOM 1510 1HA GLY A 104 134.137 -16.483 24.598 1.00 0.00  
ATOM 1511 2HA GLY A 104 133.390 -17.645 25.683 1.00 0.00  
TER 1512 GLY A 104  
ENDMDL

## 【 0 1 0 4 】

## 立体構造座標表 7

ATOM 1 N GLY A 1 128.015 1.010 -10.316 1.00 0.00  
ATOM 2 CA GLY A 1 127.655 -0.374 -10.731 1.00 0.00  
ATOM 3 C GLY A 1 128.389 -1.429 -9.927 1.00 0.00  
ATOM 4 O GLY A 1 128.645 -2.528 -10.420 1.00 0.00  
ATOM 5 1H GLY A 1 129.039 1.078 -10.148 1.00 0.00  
ATOM 6 2H GLY A 1 127.515 1.263 -9.441 1.00 0.00  
ATOM 7 3H GLY A 1 127.751 1.686 -11.061 1.00 0.00  
ATOM 8 1HA GLY A 1 126.592 -0.512 -10.600 1.00 0.00  
ATOM 9 2HA GLY A 1 127.897 -0.499 -11.776 1.00 0.00  
ATOM 10 N SER A 2 128.728 -1.096 -8.686 1.00 0.00  
ATOM 11 CA SER A 2 129.437 -2.024 -7.813 1.00 0.00  
ATOM 12 C SER A 2 128.513 -2.562 -6.726 1.00 0.00  
ATOM 13 O SER A 2 128.240 -3.761 -6.667 1.00 0.00  
ATOM 14 CB SER A 2 130.645 -1.334 -7.176 1.00 0.00  
ATOM 15 OG SER A 2 131.499 -0.785 -8.163 1.00 0.00  
ATOM 16 H SER A 2 128.496 -0.205 -8.351 1.00 0.00  
ATOM 17 HA SER A 2 129.783 -2.849 -8.417 1.00 0.00  
ATOM 18 1HB SER A 2 130.304 -0.538 -6.531 1.00 0.00  
ATOM 19 2HB SER A 2 131.203 -2.054 -6.594 1.00 0.00  
ATOM 20 HG SER A 2 132.295 -0.445 -7.746 1.00 0.00



ATOM 21	N	SER A	3	128.033	-1.668	-5.868	1.00	0.00
ATOM 22	CA	SER A	3	127.138	-2.053	-4.782	1.00	0.00
ATOM 23	C	SER A	3	125.816	-1.298	-4.873	1.00	0.00
ATOM 24	O	SER A	3	125.217	-0.951	-3.856	1.00	0.00
ATOM 25	CB	SER A	3	127.799	-1.786	-3.429	1.00	0.00
ATOM 26	OG	SER A	3	128.587	-0.609	-3.469	1.00	0.00
ATOM 27	H	SER A	3	128.287	-0.726	-5.966	1.00	0.00
ATOM 28	HA	SER A	3	126.942	-3.111	-4.873	1.00	0.00
ATOM 29	1HB	SER A	3	127.036	-1.666	-2.674	1.00	0.00
ATOM 30	2HB	SER A	3	128.434	-2.620	-3.170	1.00	0.00
ATOM 31	HG	SER A	3	128.100	0.088	-3.915	1.00	0.00
ATOM 32	N	GLY A	4	125.367	-1.048	-6.099	1.00	0.00
ATOM 33	CA	GLY A	4	124.119	-0.335	-6.299	1.00	0.00
ATOM 34	C	GLY A	4	124.265	1.160	-6.100	1.00	0.00
ATOM 35	O	GLY A	4	125.326	1.638	-5.697	1.00	0.00
ATOM 36	H	GLY A	4	125.887	-1.348	-6.873	1.00	0.00
ATOM 37	1HA	GLY A	4	123.769	-0.521	-7.304	1.00	0.00
ATOM 38	2HA	GLY A	4	123.386	-0.711	-5.600	1.00	0.00
ATOM 39	N	SER A	5	123.197	1.900	-6.381	1.00	0.00
ATOM 40	CA	SER A	5	123.211	3.351	-6.231	1.00	0.00
ATOM 41	C	SER A	5	122.158	3.804	-5.225	1.00	0.00
ATOM 42	O	SER A	5	121.565	4.872	-5.369	1.00	0.00
ATOM 43	CB	SER A	5	122.967	4.027	-7.581	1.00	0.00
ATOM 44	OG	SER A	5	123.746	5.203	-7.711	1.00	0.00
ATOM 45	H	SER A	5	122.380	1.460	-6.698	1.00	0.00
ATOM 46	HA	SER A	5	124.186	3.637	-5.866	1.00	0.00
ATOM 47	1HB	SER A	5	123.231	3.346	-8.376	1.00	0.00
ATOM 48	2HB	SER A	5	121.923	4.291	-7.665	1.00	0.00
ATOM 49	HG	SER A	5	123.666	5.731	-6.914	1.00	0.00

ATOM 50	N	SER A	6	121.929	2.982	-4.205	1.00	0.00
ATOM 51	CA	SER A	6	120.947	3.298	-3.175	1.00	0.00
ATOM 52	C	SER A	6	121.634	3.702	-1.874	1.00	0.00
ATOM 53	O	SER A	6	122.774	3.317	-1.617	1.00	0.00
ATOM 54	CB	SER A	6	120.031	2.097	-2.929	1.00	0.00
ATOM 55	OG	SER A	6	119.317	1.751	-4.103	1.00	0.00
ATOM 56	H	SER A	6	122.434	2.144	-4.144	1.00	0.00
ATOM 57	HA	SER A	6	120.352	4.127	-3.527	1.00	0.00
ATOM 58	1HB	SER A	6	120.626	1.249	-2.622	1.00	0.00
ATOM 59	2HB	SER A	6	119.324	2.340	-2.149	1.00	0.00
ATOM 60	HG	SER A	6	118.645	1.100	-3.888	1.00	0.00
ATOM 61	N	GLY A	7	120.931	4.481	-1.058	1.00	0.00
ATOM 62	CA	GLY A	7	121.489	4.925	0.206	1.00	0.00
ATOM 63	C	GLY A	7	122.446	6.089	0.041	1.00	0.00
ATOM 64	O	GLY A	7	122.121	7.080	-0.613	1.00	0.00
ATOM 65	H	GLY A	7	120.027	4.756	-1.316	1.00	0.00
ATOM 66	1HA	GLY A	7	120.683	5.226	0.857	1.00	0.00
ATOM 67	2HA	GLY A	7	122.018	4.101	0.663	1.00	0.00
ATOM 68	N	LEU A	8	123.629	5.969	0.635	1.00	0.00
ATOM 69	CA	LEU A	8	124.636	7.021	0.551	1.00	0.00
ATOM 70	C	LEU A	8	125.948	6.474	-0.004	1.00	0.00
ATOM 71	O	LEU A	8	126.512	5.522	0.535	1.00	0.00
ATOM 72	CB	LEU A	8	124.873	7.642	1.930	1.00	0.00
ATOM 73	CG	LEU A	8	123.800	8.630	2.387	1.00	0.00
ATOM 74	CD1	LEU A	8	123.646	8.590	3.899	1.00	0.00
ATOM 75	CD2	LEU A	8	124.140	10.038	1.920	1.00	0.00
ATOM 76	H	LEU A	8	123.829	5.155	1.143	1.00	0.00
ATOM 77	HA	LEU A	8	124.266	7.782	-0.119	1.00	0.00
ATOM 78	1HB	LEU A	8	124.930	6.843	2.656	1.00	0.00

ATOM 79	2HB	LEU A	8	125.821	8.158	1.911	1.00	0.00
ATOM 80	HG	LEU A	8	122.852	8.351	1.948	1.00	0.00
ATOM 81	1HD1	LEU A	8	122.870	7.887	4.164	1.00	0.00
ATOM 82	2HD1	LEU A	8	123.380	9.572	4.260	1.00	0.00
ATOM 83	3HD1	LEU A	8	124.579	8.282	4.347	1.00	0.00
ATOM 84	1HD2	LEU A	8	124.270	10.041	0.848	1.00	0.00
ATOM 85	2HD2	LEU A	8	125.054	10.363	2.396	1.00	0.00
ATOM 86	3HD2	LEU A	8	123.337	10.709	2.187	1.00	0.00
ATOM 87	N	ALA A	9	126.427	7.081	-1.085	1.00	0.00
ATOM 88	CA	ALA A	9	127.671	6.655	-1.713	1.00	0.00
ATOM 89	C	ALA A	9	128.282	7.780	-2.541	1.00	0.00
ATOM 90	O	ALA A	9	127.588	8.712	-2.947	1.00	0.00
ATOM 91	CB	ALA A	9	127.430	5.429	-2.580	1.00	0.00
ATOM 92	H	ALA A	9	125.931	7.834	-1.468	1.00	0.00
ATOM 93	HA	ALA A	9	128.363	6.381	-0.929	1.00	0.00
ATOM 94	1HB	ALA A	9	126.713	4.782	-2.099	1.00	0.00
ATOM 95	2HB	ALA A	9	128.360	4.897	-2.717	1.00	0.00
ATOM 96	3HB	ALA A	9	127.047	5.738	-3.542	1.00	0.00
ATOM 97	N	MET A	10	129.585	7.686	-2.786	1.00	0.00
ATOM 98	CA	MET A	10	130.290	8.696	-3.566	1.00	0.00
ATOM 99	C	MET A	10	131.574	8.124	-4.163	1.00	0.00
ATOM 100	O	MET A	10	132.645	8.223	-3.564	1.00	0.00
ATOM 101	CB	MET A	10	130.617	9.909	-2.692	1.00	0.00
ATOM 102	CG	MET A	10	129.385	10.644	-2.188	1.00	0.00
ATOM 103	SD	MET A	10	129.778	12.268	-1.509	1.00	0.00
ATOM 104	CE	MET A	10	128.986	13.337	-2.709	1.00	0.00
ATOM 105	H	MET A	10	130.084	6.919	-2.434	1.00	0.00
ATOM 106	HA	MET A	10	129.641	9.008	-4.370	1.00	0.00
ATOM 107	1HB	MET A	10	131.188	9.579	-1.838	1.00	0.00

ATOM 108	2HB	MET A	10	131.213	10.602	-3.267	1.00	0.00
ATOM 109	1HG	MET A	10	128.697	10.771	-3.010	1.00	0.00
ATOM 110	2HG	MET A	10	128.919	10.050	-1.416	1.00	0.00
ATOM 111	1HE	MET A	10	128.189	13.886	-2.232	1.00	0.00
ATOM 112	2HE	MET A	10	128.582	12.738	-3.512	1.00	0.00
ATOM 113	3HE	MET A	10	129.713	14.030	-3.107	1.00	0.00
ATOM 114	N	PRO A	11	131.483	7.516	-5.359	1.00	0.00
ATOM 115	CA	PRO A	11	132.643	6.928	-6.035	1.00	0.00
ATOM 116	C	PRO A	11	133.751	7.950	-6.283	1.00	0.00
ATOM 117	O	PRO A	11	134.920	7.684	-6.004	1.00	0.00
ATOM 118	CB	PRO A	11	132.081	6.413	-7.364	1.00	0.00
ATOM 119	CG	PRO A	11	130.608	6.310	-7.156	1.00	0.00
ATOM 120	CD	PRO A	11	130.246	7.356	-6.140	1.00	0.00
ATOM 121	HA	PRO A	11	133.046	6.101	-5.469	1.00	0.00
ATOM 122	1HB	PRO A	11	132.320	7.112	-8.152	1.00	0.00
ATOM 123	2HB	PRO A	11	132.514	5.451	-7.589	1.00	0.00
ATOM 124	1HG	PRO A	11	130.095	6.502	-8.085	1.00	0.00
ATOM 125	2HG	PRO A	11	130.359	5.326	-6.786	1.00	0.00
ATOM 126	1HD	PRO A	11	129.976	8.280	-6.630	1.00	0.00
ATOM 127	2HD	PRO A	11	129.437	7.010	-5.514	1.00	0.00
ATOM 128	N	PRO A	12	133.404	9.140	-6.810	1.00	0.00
ATOM 129	CA	PRO A	12	134.388	10.193	-7.083	1.00	0.00
ATOM 130	C	PRO A	12	135.197	10.557	-5.844	1.00	0.00
ATOM 131	O	PRO A	12	136.300	11.094	-5.944	1.00	0.00
ATOM 132	CB	PRO A	12	133.533	11.382	-7.530	1.00	0.00
ATOM 133	CG	PRO A	12	132.261	10.781	-8.015	1.00	0.00
ATOM 134	CD	PRO A	12	132.036	9.557	-7.172	1.00	0.00
ATOM 135	HA	PRO A	12	135.060	9.908	-7.880	1.00	0.00
ATOM 136	1HB	PRO A	12	133.364	12.042	-6.691	1.00	0.00

ATOM 137	2HB	PRO A	12	134.040	11.918	-8.318	1.00	0.00
ATOM 138	1HG	PRO A	12	131.450	11.481	-7.884	1.00	0.00
ATOM 139	2HG	PRO A	12	132.357	10.506	-9.055	1.00	0.00
ATOM 140	1HD	PRO A	12	131.462	9.806	-6.292	1.00	0.00
ATOM 141	2HD	PRO A	12	131.537	8.792	-7.746	1.00	0.00
ATOM 142	N	GLY A	13	134.641	10.259	-4.673	1.00	0.00
ATOM 143	CA	GLY A	13	135.325	10.562	-3.429	1.00	0.00
ATOM 144	C	GLY A	13	136.013	9.350	-2.835	1.00	0.00
ATOM 145	O	GLY A	13	135.664	8.902	-1.743	1.00	0.00
ATOM 146	H	GLY A	13	133.758	9.830	-4.653	1.00	0.00
ATOM 147	1HA	GLY A	13	136.063	11.328	-3.615	1.00	0.00
ATOM 148	2HA	GLY A	13	134.604	10.938	-2.717	1.00	0.00
ATOM 149	N	ASN A	14	136.995	8.818	-3.554	1.00	0.00
ATOM 150	CA	ASN A	14	137.736	7.650	-3.092	1.00	0.00
ATOM 151	C	ASN A	14	136.803	6.459	-2.890	1.00	0.00
ATOM 152	O	ASN A	14	136.816	5.818	-1.839	1.00	0.00
ATOM 153	CB	ASN A	14	138.469	7.970	-1.786	1.00	0.00
ATOM 154	CG	ASN A	14	139.436	9.126	-1.935	1.00	0.00
ATOM 155	OD1	ASN A	14	140.104	9.265	-2.961	1.00	0.00
ATOM 156	ND2	ASN A	14	139.519	9.965	-0.909	1.00	0.00
ATOM 157	H	ASN A	14	137.228	9.220	-4.417	1.00	0.00
ATOM 158	HA	ASN A	14	138.463	7.398	-3.848	1.00	0.00
ATOM 159	1HB	ASN A	14	137.743	8.227	-1.028	1.00	0.00
ATOM 160	2HB	ASN A	14	139.022	7.098	-1.468	1.00	0.00
ATOM 161	1HD2	ASN A	14	138.958	9.793	-0.124	1.00	0.00
ATOM 162	2HD2	ASN A	14	140.137	10.722	-0.978	1.00	0.00
ATOM 163	N	SER A	15	135.996	6.168	-3.905	1.00	0.00
ATOM 164	CA	SER A	15	135.055	5.054	-3.844	1.00	0.00
ATOM 165	C	SER A	15	134.001	5.290	-2.766	1.00	0.00

ATOM 166	O	SER A	15	132.873	5.682	-3.063	1.00	0.00
ATOM 167	CB	SER A	15	135.798	3.742	-3.575	1.00	0.00
ATOM 168	OG	SER A	15	136.062	3.049	-4.783	1.00	0.00
ATOM 169	H	SER A	15	136.034	6.716	-4.718	1.00	0.00
ATOM 170	HA	SER A	15	134.562	4.986	-4.802	1.00	0.00
ATOM 171	1HB	SER A	15	136.736	3.957	-3.085	1.00	0.00
ATOM 172	2HB	SER A	15	135.194	3.114	-2.938	1.00	0.00
ATOM 173	HG	SER A	15	136.234	2.124	-4.589	1.00	0.00
ATOM 174	N	HIS A	16	134.376	5.049	-1.514	1.00	0.00
ATOM 175	CA	HIS A	16	133.462	5.237	-0.393	1.00	0.00
ATOM 176	C	HIS A	16	134.143	5.997	0.742	1.00	0.00
ATOM 177	O	HIS A	16	133.685	7.064	1.150	1.00	0.00
ATOM 178	CB	HIS A	16	132.957	3.883	0.113	1.00	0.00
ATOM 179	CG	HIS A	16	131.570	3.555	-0.342	1.00	0.00
ATOM 180	ND1	HIS A	16	130.456	3.728	0.453	1.00	0.00
ATOM 181	CD2	HIS A	16	131.115	3.061	-1.519	1.00	0.00
ATOM 182	CE1	HIS A	16	129.377	3.355	-0.214	1.00	0.00
ATOM 183	NE2	HIS A	16	129.751	2.947	-1.413	1.00	0.00
ATOM 184	H	HIS A	16	135.289	4.740	-1.339	1.00	0.00
ATOM 185	HA	HIS A	16	132.622	5.817	-0.744	1.00	0.00
ATOM 186	1HB	HIS A	16	133.616	3.105	-0.245	1.00	0.00
ATOM 187	2HB	HIS A	16	132.962	3.883	1.193	1.00	0.00
ATOM 188	HD1	HIS A	16	130.456	4.074	1.370	1.00	0.00
ATOM 189	HD2	HIS A	16	131.715	2.805	-2.381	1.00	0.00
ATOM 190	HE1	HIS A	16	128.364	3.381	0.158	1.00	0.00
ATOM 191	HE2	HIS A	16	129.161	2.533	-2.078	1.00	0.00
ATOM 192	N	GLY A	17	135.238	5.440	1.246	1.00	0.00
ATOM 193	CA	GLY A	17	135.964	6.079	2.329	1.00	0.00
ATOM 194	C	GLY A	17	137.320	5.446	2.570	1.00	0.00

ATOM 195	O	GLY A	17	137.588	4.929	3.654	1.00	0.00
ATOM 196	H	GLY A	17	135.557	4.588	0.881	1.00	0.00
ATOM 197	1HA	GLY A	17	136.104	7.122	2.087	1.00	0.00
ATOM 198	2HA	GLY A	17	135.378	6.004	3.233	1.00	0.00
ATOM 199	N	LEU A	18	138.179	5.487	1.556	1.00	0.00
ATOM 200	CA	LEU A	18	139.516	4.914	1.663	1.00	0.00
ATOM 201	C	LEU A	18	140.514	5.950	2.171	1.00	0.00
ATOM 202	O	LEU A	18	140.889	6.873	1.448	1.00	0.00
ATOM 203	CB	LEU A	18	139.972	4.374	0.306	1.00	0.00
ATOM 204	CG	LEU A	18	138.938	3.521	-0.431	1.00	0.00
ATOM 205	CD1	LEU A	18	139.197	3.545	-1.929	1.00	0.00
ATOM 206	CD2	LEU A	18	138.957	2.092	0.092	1.00	0.00
ATOM 207	H	LEU A	18	137.907	5.914	0.717	1.00	0.00
ATOM 208	HA	LEU A	18	139.471	4.098	2.369	1.00	0.00
ATOM 209	1HB	LEU A	18	140.231	5.213	-0.323	1.00	0.00
ATOM 210	2HB	LEU A	18	140.856	3.774	0.460	1.00	0.00
ATOM 211	HG	LEU A	18	137.954	3.929	-0.256	1.00	0.00
ATOM 212	1HD1	LEU A	18	138.664	2.732	-2.399	1.00	0.00
ATOM 213	2HD1	LEU A	18	140.255	3.436	-2.114	1.00	0.00
ATOM 214	3HD1	LEU A	18	138.855	4.484	-2.338	1.00	0.00
ATOM 215	1HD2	LEU A	18	139.980	1.770	0.220	1.00	0.00
ATOM 216	2HD2	LEU A	18	138.461	1.443	-0.615	1.00	0.00
ATOM 217	3HD2	LEU A	18	138.445	2.050	1.041	1.00	0.00
ATOM 218	N	GLU A	19	140.937	5.792	3.420	1.00	0.00
ATOM 219	CA	GLU A	19	141.892	6.714	4.026	1.00	0.00
ATOM 220	C	GLU A	19	142.828	5.978	4.980	1.00	0.00
ATOM 221	O	GLU A	19	142.700	4.771	5.184	1.00	0.00
ATOM 222	CB	GLU A	19	141.153	7.825	4.774	1.00	0.00
ATOM 223	CG	GLU A	19	140.096	7.312	5.737	1.00	0.00

ATOM 224	CD	GLU A	19	140.078	8.078	7.045	1.00	0.00
ATOM 225	OE1	GLU A	19	139.086	8.792	7.302	1.00	0.00
ATOM 226	OE2	GLU A	19	141.056	7.963	7.814	1.00	0.00
ATOM 227	H	GLU A	19	140.601	5.037	3.947	1.00	0.00
ATOM 228	HA	GLU A	19	142.478	7.153	3.233	1.00	0.00
ATOM 229	1HB	GLU A	19	141.872	8.403	5.336	1.00	0.00
ATOM 230	2HB	GLU A	19	140.672	8.469	4.053	1.00	0.00
ATOM 231	1HG	GLU A	19	139.127	7.406	5.270	1.00	0.00
ATOM 232	2HG	GLU A	19	140.294	6.271	5.948	1.00	0.00
ATOM 233	N	VAL A	20	143.770	6.715	5.562	1.00	0.00
ATOM 234	CA	VAL A	20	144.726	6.133	6.495	1.00	0.00
ATOM 235	C	VAL A	20	144.014	5.482	7.678	1.00	0.00
ATOM 236	O	VAL A	20	143.052	6.032	8.215	1.00	0.00
ATOM 237	CB	VAL A	20	145.712	7.194	7.023	1.00	0.00
ATOM 238	CG1	VAL A	20	146.786	6.547	7.885	1.00	0.00
ATOM 239	CG2	VAL A	20	146.337	7.962	5.868	1.00	0.00
ATOM 240	H	VAL A	20	143.820	7.673	5.360	1.00	0.00
ATOM 241	HA	VAL A	20	145.291	5.378	5.968	1.00	0.00
ATOM 242	HB	VAL A	20	145.162	7.893	7.636	1.00	0.00
ATOM 243	1HG1	VAL A	20	146.375	6.316	8.857	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.615	7.229	7.999	1.00	0.00
ATOM 245	3HG1	VAL A	20	147.129	5.638	7.413	1.00	0.00
ATOM 246	1HG2	VAL A	20	147.314	8.318	6.159	1.00	0.00
ATOM 247	2HG2	VAL A	20	145.708	8.802	5.613	1.00	0.00
ATOM 248	3HG2	VAL A	20	146.431	7.310	5.012	1.00	0.00
ATOM 249	N	GLY A	21	144.493	4.309	8.077	1.00	0.00
ATOM 250	CA	GLY A	21	143.890	3.603	9.192	1.00	0.00
ATOM 251	C	GLY A	21	142.852	2.592	8.746	1.00	0.00
ATOM 252	O	GLY A	21	142.800	1.477	9.261	1.00	0.00



ATOM 253	H	GLY A	21	145.263	3.919	7.611	1.00	0.00
ATOM 254	1HA	GLY A	21	144.666	3.088	9.740	1.00	0.00
ATOM 255	2HA	GLY A	21	143.419	4.321	9.846	1.00	0.00
ATOM 256	N	SER A	22	142.024	2.985	7.783	1.00	0.00
ATOM 257	CA	SER A	22	140.981	2.106	7.266	1.00	0.00
ATOM 258	C	SER A	22	141.573	1.041	6.348	1.00	0.00
ATOM 259	O	SER A	22	142.497	1.314	5.581	1.00	0.00
ATOM 260	CB	SER A	22	139.928	2.918	6.510	1.00	0.00
ATOM 261	OG	SER A	22	139.576	4.090	7.227	1.00	0.00
ATOM 262	H	SER A	22	142.115	3.887	7.412	1.00	0.00
ATOM 263	HA	SER A	22	140.512	1.619	8.107	1.00	0.00
ATOM 264	1HB	SER A	22	140.321	3.206	5.547	1.00	0.00
ATOM 265	2HB	SER A	22	139.042	2.316	6.372	1.00	0.00
ATOM 266	HG	SER A	22	140.307	4.712	7.202	1.00	0.00
ATOM 267	N	LEU A	23	141.037	-0.171	6.433	1.00	0.00
ATOM 268	CA	LEU A	23	141.513	-1.277	5.610	1.00	0.00
ATOM 269	C	LEU A	23	141.115	-1.081	4.150	1.00	0.00
ATOM 270	O	LEU A	23	140.071	-0.500	3.854	1.00	0.00
ATOM 271	CB	LEU A	23	140.956	-2.603	6.129	1.00	0.00
ATOM 272	CG	LEU A	23	141.330	-2.942	7.574	1.00	0.00
ATOM 273	CD1	LEU A	23	140.251	-3.798	8.217	1.00	0.00
ATOM 274	CD2	LEU A	23	142.675	-3.649	7.623	1.00	0.00
ATOM 275	H	LEU A	23	140.303	-0.327	7.064	1.00	0.00
ATOM 276	HA	LEU A	23	142.590	-1.299	5.677	1.00	0.00
ATOM 277	1HB	LEU A	23	139.878	-2.570	6.056	1.00	0.00
ATOM 278	2HB	LEU A	23	141.319	-3.396	5.492	1.00	0.00
ATOM 279	HG	LEU A	23	141.411	-2.026	8.140	1.00	0.00
ATOM 280	1HD1	LEU A	23	140.197	-3.576	9.273	1.00	0.00
ATOM 281	2HD1	LEU A	23	140.490	-4.843	8.080	1.00	0.00

ATOM 282	3HD1	LEU A	23	139.298	-3.584	7.756	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.218	-3.332	8.501	1.00	0.00
ATOM 284	2HD2	LEU A	23	143.245	-3.402	6.739	1.00	0.00
ATOM 285	3HD2	LEU A	23	142.519	-4.718	7.662	1.00	0.00
ATOM 286	N	ALA A	24	141.955	-1.570	3.243	1.00	0.00
ATOM 287	CA	ALA A	24	141.691	-1.451	1.815	1.00	0.00
ATOM 288	C	ALA A	24	142.305	-2.615	1.045	1.00	0.00
ATOM 289	O	ALA A	24	143.292	-3.209	1.480	1.00	0.00
ATOM 290	CB	ALA A	24	142.226	-0.127	1.289	1.00	0.00
ATOM 291	H	ALA A	24	142.771	-2.023	3.542	1.00	0.00
ATOM 292	HA	ALA A	24	140.621	-1.462	1.671	1.00	0.00
ATOM 293	1HB	ALA A	24	142.507	-0.239	0.251	1.00	0.00
ATOM 294	2HB	ALA A	24	143.091	0.166	1.866	1.00	0.00
ATOM 295	3HB	ALA A	24	141.461	0.630	1.375	1.00	0.00
ATOM 296	N	GLU A	25	141.715	-2.937	-0.102	1.00	0.00
ATOM 297	CA	GLU A	25	142.205	-4.032	-0.932	1.00	0.00
ATOM 298	C	GLU A	25	142.605	-3.530	-2.316	1.00	0.00
ATOM 299	O	GLU A	25	142.089	-2.519	-2.793	1.00	0.00
ATOM 300	CB	GLU A	25	141.136	-5.119	-1.062	1.00	0.00
ATOM 301	CG	GLU A	25	141.708	-6.516	-1.245	1.00	0.00
ATOM 302	CD	GLU A	25	140.729	-7.464	-1.909	1.00	0.00
ATOM 303	OE1	GLU A	25	139.929	-6.999	-2.749	1.00	0.00
ATOM 304	OE2	GLU A	25	140.762	-8.671	-1.590	1.00	0.00
ATOM 305	H	GLU A	25	140.932	-2.428	-0.396	1.00	0.00
ATOM 306	HA	GLU A	25	143.075	-4.452	-0.449	1.00	0.00
ATOM 307	1HB	GLU A	25	140.527	-5.117	-0.170	1.00	0.00
ATOM 308	2HB	GLU A	25	140.512	-4.894	-1.915	1.00	0.00
ATOM 309	1HG	GLU A	25	142.594	-6.451	-1.858	1.00	0.00
ATOM 310	2HG	GLU A	25	141.970	-6.913	-0.275	1.00	0.00

ATOM 311	N	VAL A	26	143.528	-4.243	-2.954	1.00	0.00
ATOM 312	CA	VAL A	26	143.998	-3.869	-4.282	1.00	0.00
ATOM 313	C	VAL A	26	143.826	-5.020	-5.268	1.00	0.00
ATOM 314	O	VAL A	26	144.136	-6.170	-4.955	1.00	0.00
ATOM 315	CB	VAL A	26	145.480	-3.446	-4.258	1.00	0.00
ATOM 316	CG1	VAL A	26	145.909	-2.913	-5.616	1.00	0.00
ATOM 317	CG2	VAL A	26	145.722	-2.410	-3.170	1.00	0.00
ATOM 318	H	VAL A	26	143.901	-5.039	-2.521	1.00	0.00
ATOM 319	HA	VAL A	26	143.411	-3.027	-4.621	1.00	0.00
ATOM 320	HB	VAL A	26	146.078	-4.318	-4.033	1.00	0.00
ATOM 321	1HG1	VAL A	26	145.900	-1.833	-5.598	1.00	0.00
ATOM 322	2HG1	VAL A	26	145.225	-3.266	-6.374	1.00	0.00
ATOM 323	3HG1	VAL A	26	146.905	-3.261	-5.841	1.00	0.00
ATOM 324	1HG2	VAL A	26	146.651	-2.631	-2.663	1.00	0.00
ATOM 325	2HG2	VAL A	26	144.909	-2.434	-2.460	1.00	0.00
ATOM 326	3HG2	VAL A	26	145.781	-1.428	-3.616	1.00	0.00
ATOM 327	N	LYS A	27	143.330	-4.704	-6.460	1.00	0.00
ATOM 328	CA	LYS A	27	143.116	-5.712	-7.491	1.00	0.00
ATOM 329	C	LYS A	27	144.437	-6.118	-8.137	1.00	0.00
ATOM 330	O	LYS A	27	144.790	-5.631	-9.211	1.00	0.00
ATOM 331	CB	LYS A	27	142.155	-5.184	-8.558	1.00	0.00
ATOM 332	CG	LYS A	27	140.694	-5.475	-8.257	1.00	0.00
ATOM 333	CD	LYS A	27	139.793	-4.342	-8.722	1.00	0.00
ATOM 334	CE	LYS A	27	138.436	-4.857	-9.172	1.00	0.00
ATOM 335	NZ	LYS A	27	137.427	-4.798	-8.079	1.00	0.00
ATOM 336	H	LYS A	27	143.102	-3.769	-6.649	1.00	0.00
ATOM 337	HA	LYS A	27	142.677	-6.579	-7.021	1.00	0.00
ATOM 338	1HB	LYS A	27	142.277	-4.114	-8.639	1.00	0.00
ATOM 339	2HB	LYS A	27	142.403	-5.638	-9.506	1.00	0.00

ATOM 340	1HG	LYS A	27	140.405	-6.382	-8.767	1.00	0.00
ATOM 341	2HG	LYS A	27	140.574	-5.604	-7.192	1.00	0.00
ATOM 342	1HD	LYS A	27	139.650	-3.651	-7.905	1.00	0.00
ATOM 343	2HD	LYS A	27	140.268	-3.833	-9.549	1.00	0.00
ATOM 344	1HE	LYS A	27	138.092	-4.255	-10.000	1.00	0.00
ATOM 345	2HE	LYS A	27	138.544	-5.883	-9.497	1.00	0.00
ATOM 346	1HZ	LYS A	27	136.494	-4.552	-8.466	1.00	0.00
ATOM 347	2HZ	LYS A	27	137.700	-4.079	-7.379	1.00	0.00
ATOM 348	3HZ	LYS A	27	137.361	-5.721	-7.603	1.00	0.00
ATOM 349	N	GLU A	28	145.162	-7.014	-7.475	1.00	0.00
ATOM 350	CA	GLU A	28	146.444	-7.487	-7.986	1.00	0.00
ATOM 351	C	GLU A	28	146.465	-9.010	-8.076	1.00	0.00
ATOM 352	O	GLU A	28	145.504	-9.678	-7.694	1.00	0.00
ATOM 353	CB	GLU A	28	147.585	-6.998	-7.090	1.00	0.00
ATOM 354	CG	GLU A	28	148.729	-6.358	-7.858	1.00	0.00
ATOM 355	CD	GLU A	28	149.850	-5.889	-6.951	1.00	0.00
ATOM 356	OE1	GLU A	28	150.027	-4.661	-6.811	1.00	0.00
ATOM 357	OE2	GLU A	28	150.550	-6.751	-6.378	1.00	0.00
ATOM 358	H	GLU A	28	144.828	-7.367	-6.625	1.00	0.00
ATOM 359	HA	GLU A	28	146.577	-7.079	-8.976	1.00	0.00
ATOM 360	1HB	GLU A	28	147.195	-6.271	-6.394	1.00	0.00
ATOM 361	2HB	GLU A	28	147.979	-7.838	-6.535	1.00	0.00
ATOM 362	1HG	GLU A	28	149.129	-7.080	-8.553	1.00	0.00
ATOM 363	2HG	GLU A	28	148.348	-5.507	-8.404	1.00	0.00
ATOM 364	N	ASN A	29	147.568	-9.551	-8.582	1.00	0.00
ATOM 365	CA	ASN A	29	147.716	-10.996	-8.721	1.00	0.00
ATOM 366	C	ASN A	29	147.613	-11.688	-7.363	1.00	0.00
ATOM 367	O	ASN A	29	146.752	-12.543	-7.158	1.00	0.00
ATOM 368	CB	ASN A	29	149.055	-11.331	-9.380	1.00	0.00

ATOM 369	CG	ASN A	29	148.926	-11.543	-10.876	1.00	0.00
ATOM 370	OD1	ASN A	29	149.065	-12.662	-11.371	1.00	0.00
ATOM 371	ND2	ASN A	29	148.660	-10.465	-11.605	1.00	0.00
ATOM 372	H	ASN A	29	148.301	-8.967	-8.868	1.00	0.00
ATOM 373	HA	ASN A	29	146.915	-11.351	-9.353	1.00	0.00
ATOM 374	1HB	ASN A	29	149.747	-10.520	-9.210	1.00	0.00
ATOM 375	2HB	ASN A	29	149.451	-12.235	-8.939	1.00	0.00
ATOM 376	1HD2	ASN A	29	148.563	-9.606	-11.144	1.00	0.00
ATOM 377	2HD2	ASN A	29	148.571	-10.574	-12.575	1.00	0.00
ATOM 378	N	PRO A	30	148.497	-11.327	-6.416	1.00	0.00
ATOM 379	CA	PRO A	30	148.502	-11.917	-5.076	1.00	0.00
ATOM 380	C	PRO A	30	147.380	-11.368	-4.195	1.00	0.00
ATOM 381	O	PRO A	30	147.416	-10.208	-3.786	1.00	0.00
ATOM 382	CB	PRO A	30	149.865	-11.505	-4.521	1.00	0.00
ATOM 383	CG	PRO A	30	150.175	-10.219	-5.206	1.00	0.00
ATOM 384	CD	PRO A	30	149.559	-10.314	-6.578	1.00	0.00
ATOM 385	HA	PRO A	30	148.437	-12.993	-5.117	1.00	0.00
ATOM 386	1HB	PRO A	30	149.797	-11.378	-3.450	1.00	0.00
ATOM 387	2HB	PRO A	30	150.597	-12.263	-4.755	1.00	0.00
ATOM 388	1HG	PRO A	30	149.739	-9.397	-4.657	1.00	0.00
ATOM 389	2HG	PRO A	30	151.244	-10.094	-5.285	1.00	0.00
ATOM 390	1HD	PRO A	30	149.142	-9.362	-6.870	1.00	0.00
ATOM 391	2HD	PRO A	30	150.294	-10.640	-7.298	1.00	0.00
ATOM 392	N	PRO A	31	146.363	-12.196	-3.889	1.00	0.00
ATOM 393	CA	PRO A	31	145.234	-11.777	-3.052	1.00	0.00
ATOM 394	C	PRO A	31	145.642	-11.550	-1.601	1.00	0.00
ATOM 395	O	PRO A	31	145.519	-12.444	-0.764	1.00	0.00
ATOM 396	CB	PRO A	31	144.257	-12.951	-3.155	1.00	0.00
ATOM 397	CG	PRO A	31	145.111	-14.127	-3.484	1.00	0.00

ATOM 398	CD	PRO A	31	146.234	-13.598	-4.331	1.00	0.00
ATOM 399	HA	PRO A	31	144.767	-10.882	-3.438	1.00	0.00
ATOM 400	1HB	PRO A	31	143.748	-13.083	-2.212	1.00	0.00
ATOM 401	2HB	PRO A	31	143.537	-12.757	-3.936	1.00	0.00
ATOM 402	1HG	PRO A	31	145.499	-14.563	-2.575	1.00	0.00
ATOM 403	2HG	PRO A	31	144.536	-14.855	-4.037	1.00	0.00
ATOM 404	1HD	PRO A	31	147.143	-14.148	-4.138	1.00	0.00
ATOM 405	2HD	PRO A	31	145.974	-13.649	-5.378	1.00	0.00
ATOM 406	N	PHE A	32	146.130	-10.348	-1.310	1.00	0.00
ATOM 407	CA	PHE A	32	146.557	-10.002	0.040	1.00	0.00
ATOM 408	C	PHE A	32	145.562	-9.052	0.699	1.00	0.00
ATOM 409	O	PHE A	32	144.630	-8.569	0.056	1.00	0.00
ATOM 410	CB	PHE A	32	147.947	-9.364	0.009	1.00	0.00
ATOM 411	CG	PHE A	32	148.016	-8.116	-0.824	1.00	0.00
ATOM 412	CD1	PHE A	32	148.649	-8.124	-2.056	1.00	0.00
ATOM 413	CD2	PHE A	32	147.447	-6.935	-0.374	1.00	0.00
ATOM 414	CE1	PHE A	32	148.713	-6.978	-2.825	1.00	0.00
ATOM 415	CE2	PHE A	32	147.508	-5.785	-1.139	1.00	0.00
ATOM 416	CZ	PHE A	32	148.143	-5.807	-2.366	1.00	0.00
ATOM 417	H	PHE A	32	146.203	-9.678	-2.022	1.00	0.00
ATOM 418	HA	PHE A	32	146.602	-10.913	0.617	1.00	0.00
ATOM 419	1HB	PHE A	32	148.240	-9.107	1.017	1.00	0.00
ATOM 420	2HB	PHE A	32	148.652	-10.075	-0.395	1.00	0.00
ATOM 421	HD1	PHE A	32	149.095	-9.039	-2.416	1.00	0.00
ATOM 422	HD2	PHE A	32	146.950	-6.918	0.584	1.00	0.00
ATOM 423	HE1	PHE A	32	149.211	-6.997	-3.784	1.00	0.00
ATOM 424	HE2	PHE A	32	147.060	-4.872	-0.778	1.00	0.00
ATOM 425	HZ	PHE A	32	148.192	-4.910	-2.965	1.00	0.00
ATOM 426	N	TYR A	33	145.770	-8.785	1.984	1.00	0.00

ATOM 427	CA	TYR A	33	144.892	-7.892	2.731	1.00	0.00
ATOM 428	C	TYR A	33	145.696	-7.001	3.673	1.00	0.00
ATOM 429	O	TYR A	33	146.335	-7.487	4.607	1.00	0.00
ATOM 430	CB	TYR A	33	143.865	-8.699	3.527	1.00	0.00
ATOM 431	CG	TYR A	33	142.662	-9.121	2.712	1.00	0.00
ATOM 432	CD1	TYR A	33	141.948	-8.193	1.962	1.00	0.00
ATOM 433	CD2	TYR A	33	142.243	-10.444	2.691	1.00	0.00
ATOM 434	CE1	TYR A	33	140.848	-8.576	1.217	1.00	0.00
ATOM 435	CE2	TYR A	33	141.145	-10.833	1.947	1.00	0.00
ATOM 436	CZ	TYR A	33	140.452	-9.896	1.212	1.00	0.00
ATOM 437	OH	TYR A	33	139.358	-10.279	0.469	1.00	0.00
ATOM 438	H	TYR A	33	146.531	-9.200	2.442	1.00	0.00
ATOM 439	HA	TYR A	33	144.373	-7.267	2.020	1.00	0.00
ATOM 440	1HB	TYR A	33	144.335	-9.592	3.908	1.00	0.00
ATOM 441	2HB	TYR A	33	143.512	-8.102	4.355	1.00	0.00
ATOM 442	HD1	TYR A	33	142.261	-7.160	1.968	1.00	0.00
ATOM 443	HD2	TYR A	33	142.788	-11.177	3.268	1.00	0.00
ATOM 444	HE1	TYR A	33	140.306	-7.840	0.641	1.00	0.00
ATOM 445	HE2	TYR A	33	140.835	-11.869	1.943	1.00	0.00
ATOM 446	HH	TYR A	33	139.593	-11.028	-0.083	1.00	0.00
ATOM 447	N	GLY A	34	145.660	-5.697	3.422	1.00	0.00
ATOM 448	CA	GLY A	34	146.389	-4.761	4.257	1.00	0.00
ATOM 449	C	GLY A	34	145.568	-3.537	4.613	1.00	0.00
ATOM 450	O	GLY A	34	144.380	-3.465	4.294	1.00	0.00
ATOM 451	H	GLY A	34	145.133	-5.368	2.664	1.00	0.00
ATOM 452	1HA	GLY A	34	146.683	-5.260	5.168	1.00	0.00
ATOM 453	2HA	GLY A	34	147.278	-4.443	3.731	1.00	0.00
ATOM 454	N	VAL A	35	146.200	-2.573	5.275	1.00	0.00
ATOM 455	CA	VAL A	35	145.520	-1.348	5.674	1.00	0.00

ATOM 456	C	VAL A	35	146.266	-0.117	5.168	1.00	0.00
ATOM 457	O	VAL A	35	147.494	-0.110	5.093	1.00	0.00
ATOM 458	CB	VAL A	35	145.376	-1.261	7.207	1.00	0.00
ATOM 459	CG1	VAL A	35	146.742	-1.264	7.877	1.00	0.00
ATOM 460	CG2	VAL A	35	144.581	-0.024	7.601	1.00	0.00
ATOM 461	H	VAL A	35	147.147	-2.690	5.499	1.00	0.00
ATOM 462	HA	VAL A	35	144.531	-1.360	5.241	1.00	0.00
ATOM 463	HB	VAL A	35	144.834	-2.131	7.546	1.00	0.00
ATOM 464	1HG1	VAL A	35	146.735	-0.577	8.711	1.00	0.00
ATOM 465	2HG1	VAL A	35	147.493	-0.959	7.165	1.00	0.00
ATOM 466	3HG1	VAL A	35	146.965	-2.258	8.232	1.00	0.00
ATOM 467	1HG2	VAL A	35	144.998	0.843	7.113	1.00	0.00
ATOM 468	2HG2	VAL A	35	144.629	0.108	8.672	1.00	0.00
ATOM 469	3HG2	VAL A	35	143.551	-0.146	7.300	1.00	0.00
ATOM 470	N	ILE A	36	145.515	0.923	4.822	1.00	0.00
ATOM 471	CA	ILE A	36	146.105	2.160	4.324	1.00	0.00
ATOM 472	C	ILE A	36	147.035	2.779	5.362	1.00	0.00
ATOM 473	O	ILE A	36	146.862	2.574	6.564	1.00	0.00
ATOM 474	CB	ILE A	36	145.023	3.188	3.939	1.00	0.00
ATOM 475	CG1	ILE A	36	144.010	2.562	2.977	1.00	0.00
ATOM 476	CG2	ILE A	36	145.660	4.422	3.315	1.00	0.00
ATOM 477	CD1	ILE A	36	142.915	3.515	2.548	1.00	0.00
ATOM 478	H	ILE A	36	144.540	0.859	4.905	1.00	0.00
ATOM 479	HA	ILE A	36	146.678	1.923	3.439	1.00	0.00
ATOM 480	HB	ILE A	36	144.512	3.494	4.840	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.525	2.229	2.089	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.544	1.715	3.457	1.00	0.00
ATOM 483	1HG2	ILE A	36	146.128	5.015	4.087	1.00	0.00
ATOM 484	2HG2	ILE A	36	144.900	5.009	2.822	1.00	0.00



ATOM 485	3HG2	ILE	A	36	146.404	4.117	2.593	1.00	0.00
ATOM 486	1HD1	ILE	A	36	142.149	3.548	3.308	1.00	0.00
ATOM 487	2HD1	ILE	A	36	142.486	3.173	1.617	1.00	0.00
ATOM 488	3HD1	ILE	A	36	143.330	4.502	2.412	1.00	0.00
ATOM 489	N	ARG	A	37	148.020	3.537	4.891	1.00	0.00
ATOM 490	CA	ARG	A	37	148.977	4.184	5.780	1.00	0.00
ATOM 491	C	ARG	A	37	149.216	5.631	5.364	1.00	0.00
ATOM 492	O	ARG	A	37	148.844	6.563	6.078	1.00	0.00
ATOM 493	CB	ARG	A	37	150.300	3.418	5.782	1.00	0.00
ATOM 494	CG	ARG	A	37	150.144	1.935	6.077	1.00	0.00
ATOM 495	CD	ARG	A	37	150.115	1.667	7.572	1.00	0.00
ATOM 496	NE	ARG	A	37	148.908	2.196	8.201	1.00	0.00
ATOM 497	CZ	ARG	A	37	148.788	2.420	9.508	1.00	0.00
ATOM 498	NH1	ARG	A	37	149.800	2.159	10.327	1.00	0.00
ATOM 499	NH2	ARG	A	37	147.654	2.904	9.997	1.00	0.00
ATOM 500	H	ARG	A	37	148.105	3.662	3.924	1.00	0.00
ATOM 501	HA	ARG	A	37	148.563	4.173	6.778	1.00	0.00
ATOM 502	1HB	ARG	A	37	150.766	3.523	4.813	1.00	0.00
ATOM 503	2HB	ARG	A	37	150.950	3.845	6.532	1.00	0.00
ATOM 504	1HG	ARG	A	37	149.220	1.587	5.641	1.00	0.00
ATOM 505	2HG	ARG	A	37	150.976	1.402	5.640	1.00	0.00
ATOM 506	1HD	ARG	A	37	150.154	0.600	7.734	1.00	0.00
ATOM 507	2HD	ARG	A	37	150.979	2.130	8.025	1.00	0.00
ATOM 508	HE	ARG	A	37	148.145	2.397	7.619	1.00	0.00
ATOM 509	1HH1	ARG	A	37	150.657	1.793	9.966	1.00	0.00
ATOM 510	2HH1	ARG	A	37	149.704	2.329	11.308	1.00	0.00
ATOM 511	1HH2	ARG	A	37	146.890	3.103	9.384	1.00	0.00
ATOM 512	2HH2	ARG	A	37	147.565	3.072	10.979	1.00	0.00
ATOM 513	N	TRP	A	38	149.841	5.814	4.206	1.00	0.00

ATOM 514	CA	TRP A	38	150.132	7.149	3.697	1.00	0.00
ATOM 515	C	TRP A	38	149.473	7.373	2.337	1.00	0.00
ATOM 516	O	TRP A	38	149.599	6.550	1.431	1.00	0.00
ATOM 517	CB	TRP A	38	151.647	7.361	3.589	1.00	0.00
ATOM 518	CG	TRP A	38	152.027	8.592	2.820	1.00	0.00
ATOM 519	CD1	TRP A	38	152.264	9.837	3.329	1.00	0.00
ATOM 520	CD2	TRP A	38	152.208	8.696	1.403	1.00	0.00
ATOM 521	NE1	TRP A	38	152.581	10.708	2.314	1.00	0.00
ATOM 522	CE2	TRP A	38	152.554	10.031	1.123	1.00	0.00
ATOM 523	CE3	TRP A	38	152.112	7.789	0.344	1.00	0.00
ATOM 524	CZ2	TRP A	38	152.803	10.479	-0.172	1.00	0.00
ATOM 525	CZ3	TRP A	38	152.360	8.234	-0.940	1.00	0.00
ATOM 526	CH2	TRP A	38	152.702	9.569	-1.189	1.00	0.00
ATOM 527	H	TRP A	38	150.114	5.032	3.682	1.00	0.00
ATOM 528	HA	TRP A	38	149.728	7.865	4.398	1.00	0.00
ATOM 529	1HB	TRP A	38	152.062	7.447	4.581	1.00	0.00
ATOM 530	2HB	TRP A	38	152.086	6.508	3.092	1.00	0.00
ATOM 531	HD1	TRP A	38	152.207	10.086	4.378	1.00	0.00
ATOM 532	HE1	TRP A	38	152.794	11.659	2.426	1.00	0.00
ATOM 533	HE3	TRP A	38	151.849	6.756	0.517	1.00	0.00
ATOM 534	HZ2	TRP A	38	153.065	11.506	-0.381	1.00	0.00
ATOM 535	HZ3	TRP A	38	152.290	7.547	-1.770	1.00	0.00
ATOM 536	HH2	TRP A	38	152.887	9.873	-2.209	1.00	0.00
ATOM 537	N	ILE A	39	148.781	8.499	2.204	1.00	0.00
ATOM 538	CA	ILE A	39	148.111	8.845	0.957	1.00	0.00
ATOM 539	C	ILE A	39	148.616	10.185	0.433	1.00	0.00
ATOM 540	O	ILE A	39	148.281	11.239	0.974	1.00	0.00
ATOM 541	CB	ILE A	39	146.583	8.917	1.137	1.00	0.00
ATOM 542	CG1	ILE A	39	146.066	7.647	1.816	1.00	0.00

ATOM 543	CG2	ILE A	39	145.898	9.121	-0.206	1.00	0.00
ATOM 544	CD1	ILE A	39	144.781	7.854	2.588	1.00	0.00
ATOM 545	H	ILE A	39	148.726	9.117	2.963	1.00	0.00
ATOM 546	HA	ILE A	39	148.335	8.077	0.231	1.00	0.00
ATOM 547	HB	ILE A	39	146.356	9.767	1.761	1.00	0.00
ATOM 548	1HG1	ILE A	39	145.881	6.894	1.064	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.814	7.285	2.506	1.00	0.00
ATOM 550	1HG2	ILE A	39	146.213	8.348	-0.892	1.00	0.00
ATOM 551	2HG2	ILE A	39	146.169	10.088	-0.605	1.00	0.00
ATOM 552	3HG2	ILE A	39	144.827	9.073	-0.076	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.535	6.952	3.127	1.00	0.00
ATOM 554	2HD1	ILE A	39	143.983	8.092	1.900	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.908	8.668	3.286	1.00	0.00
ATOM 556	N	GLY A	40	149.429	10.140	-0.617	1.00	0.00
ATOM 557	CA	GLY A	40	149.970	11.360	-1.185	1.00	0.00
ATOM 558	C	GLY A	40	150.570	11.152	-2.561	1.00	0.00
ATOM 559	O	GLY A	40	150.382	10.103	-3.177	1.00	0.00
ATOM 560	H	GLY A	40	149.667	9.272	-1.006	1.00	0.00
ATOM 561	1HA	GLY A	40	149.179	12.091	-1.257	1.00	0.00
ATOM 562	2HA	GLY A	40	150.735	11.740	-0.525	1.00	0.00
ATOM 563	N	GLN A	41	151.290	12.159	-3.044	1.00	0.00
ATOM 564	CA	GLN A	41	151.919	12.094	-4.355	1.00	0.00
ATOM 565	C	GLN A	41	153.396	12.478	-4.267	1.00	0.00
ATOM 566	O	GLN A	41	153.728	13.616	-3.935	1.00	0.00
ATOM 567	CB	GLN A	41	151.195	13.024	-5.325	1.00	0.00
ATOM 568	CG	GLN A	41	149.683	12.862	-5.309	1.00	0.00
ATOM 569	CD	GLN A	41	148.955	14.188	-5.405	1.00	0.00
ATOM 570	OE1	GLN A	41	148.905	14.953	-4.443	1.00	0.00
ATOM 571	NE2	GLN A	41	148.387	14.464	-6.571	1.00	0.00

ATOM 572	H	GLN A	41	151.398	12.969	-2.505	1.00	0.00
ATOM 573	HA	GLN A	41	151.839	11.080	-4.713	1.00	0.00
ATOM 574	1HB	GLN A	41	151.427	14.046	-5.067	1.00	0.00
ATOM 575	2HB	GLN A	41	151.546	12.826	-6.325	1.00	0.00
ATOM 576	1HG	GLN A	41	149.390	12.247	-6.145	1.00	0.00
ATOM 577	2HG	GLN A	41	149.396	12.376	-4.388	1.00	0.00
ATOM 578	1HE2	GLN A	41	148.468	13.805	-7.292	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.910	15.314	-6.665	1.00	0.00
ATOM 580	N	PRO A	42	154.309	11.532	-4.559	1.00	0.00
ATOM 581	CA	PRO A	42	155.752	11.787	-4.505	1.00	0.00
ATOM 582	C	PRO A	42	156.172	12.938	-5.414	1.00	0.00
ATOM 583	O	PRO A	42	155.454	13.294	-6.350	1.00	0.00
ATOM 584	CB	PRO A	42	156.371	10.471	-4.989	1.00	0.00
ATOM 585	CG	PRO A	42	155.320	9.444	-4.752	1.00	0.00
ATOM 586	CD	PRO A	42	154.010	10.147	-4.961	1.00	0.00
ATOM 587	HA	PRO A	42	156.079	11.991	-3.496	1.00	0.00
ATOM 588	1HB	PRO A	42	156.616	10.552	-6.039	1.00	0.00
ATOM 589	2HB	PRO A	42	157.265	10.260	-4.420	1.00	0.00
ATOM 590	1HG	PRO A	42	155.429	8.634	-5.458	1.00	0.00
ATOM 591	2HG	PRO A	42	155.389	9.074	-3.739	1.00	0.00
ATOM 592	1HD	PRO A	42	153.719	10.100	-6.000	1.00	0.00
ATOM 593	2HD	PRO A	42	153.244	9.717	-4.331	1.00	0.00
ATOM 594	N	PRO A	43	157.345	13.537	-5.151	1.00	0.00
ATOM 595	CA	PRO A	43	157.858	14.653	-5.950	1.00	0.00
ATOM 596	C	PRO A	43	158.331	14.206	-7.328	1.00	0.00
ATOM 597	O	PRO A	43	159.507	13.894	-7.520	1.00	0.00
ATOM 598	CB	PRO A	43	159.035	15.169	-5.124	1.00	0.00
ATOM 599	CG	PRO A	43	159.493	13.989	-4.340	1.00	0.00
ATOM 600	CD	PRO A	43	158.261	13.173	-4.054	1.00	0.00

ATOM 601	HA	PRO A	43	157.120	15.433	-6.060	1.00	0.00
ATOM 602	1HB	PRO A	43	159.809	15.530	-5.785	1.00	0.00
ATOM 603	2HB	PRO A	43	158.703	15.968	-4.478	1.00	0.00
ATOM 604	1HG	PRO A	43	160.198	13.412	-4.922	1.00	0.00
ATOM 605	2HG	PRO A	43	159.948	14.316	-3.417	1.00	0.00
ATOM 606	1HD	PRO A	43	158.493	12.119	-4.080	1.00	0.00
ATOM 607	2HD	PRO A	43	157.843	13.445	-3.096	1.00	0.00
ATOM 608	N	GLY A	44	157.411	14.178	-8.286	1.00	0.00
ATOM 609	CA	GLY A	44	157.758	13.769	-9.633	1.00	0.00
ATOM 610	C	GLY A	44	156.560	13.280	-10.418	1.00	0.00
ATOM 611	O	GLY A	44	156.327	13.716	-11.546	1.00	0.00
ATOM 612	H	GLY A	44	156.490	14.438	-8.076	1.00	0.00
ATOM 613	1HA	GLY A	44	158.194	14.610	-10.151	1.00	0.00
ATOM 614	2HA	GLY A	44	158.488	12.976	-9.579	1.00	0.00
ATOM 615	N	LEU A	45	155.794	12.370	-9.824	1.00	0.00
ATOM 616	CA	LEU A	45	154.613	11.822	-10.479	1.00	0.00
ATOM 617	C	LEU A	45	153.363	12.082	-9.648	1.00	0.00
ATOM 618	O	LEU A	45	153.203	11.525	-8.562	1.00	0.00
ATOM 619	CB	LEU A	45	154.783	10.318	-10.708	1.00	0.00
ATOM 620	CG	LEU A	45	155.251	9.525	-9.486	1.00	0.00
ATOM 621	CD1	LEU A	45	154.856	8.060	-9.614	1.00	0.00
ATOM 622	CD2	LEU A	45	156.757	9.664	-9.304	1.00	0.00
ATOM 623	H	LEU A	45	156.030	12.060	-8.922	1.00	0.00
ATOM 624	HA	LEU A	45	154.505	12.313	-11.435	1.00	0.00
ATOM 625	1HB	LEU A	45	153.834	9.915	-11.032	1.00	0.00
ATOM 626	2HB	LEU A	45	155.504	10.175	-11.499	1.00	0.00
ATOM 627	HG	LEU A	45	154.770	9.923	-8.604	1.00	0.00
ATOM 628	1HD1	LEU A	45	154.124	7.818	-8.858	1.00	0.00
ATOM 629	2HD1	LEU A	45	155.729	7.438	-9.480	1.00	0.00

ATOM 630	3HD1	LEU	A	45	154.437	7.883	-10.593	1.00	0.00
ATOM 631	1HD2	LEU	A	45	156.974	9.910	-8.275	1.00	0.00
ATOM 632	2HD2	LEU	A	45	157.127	10.451	-9.947	1.00	0.00
ATOM 633	3HD2	LEU	A	45	157.239	8.733	-9.562	1.00	0.00
ATOM 634	N	ASN	A	46	152.477	12.930	-10.162	1.00	0.00
ATOM 635	CA	ASN	A	46	151.245	13.251	-9.454	1.00	0.00
ATOM 636	C	ASN	A	46	150.273	12.078	-9.511	1.00	0.00
ATOM 637	O	ASN	A	46	149.690	11.790	-10.556	1.00	0.00
ATOM 638	CB	ASN	A	46	150.597	14.498	-10.061	1.00	0.00
ATOM 639	CG	ASN	A	46	149.341	14.917	-9.325	1.00	0.00
ATOM 640	OD1	ASN	A	46	149.358	15.856	-8.529	1.00	0.00
ATOM 641	ND2	ASN	A	46	148.241	14.221	-9.587	1.00	0.00
ATOM 642	H	ASN	A	46	152.654	13.344	-11.032	1.00	0.00
ATOM 643	HA	ASN	A	46	151.494	13.450	-8.423	1.00	0.00
ATOM 644	1HB	ASN	A	46	151.301	15.315	-10.025	1.00	0.00
ATOM 645	2HB	ASN	A	46	150.338	14.296	-11.091	1.00	0.00
ATOM 646	1HD2	ASN	A	46	148.301	13.486	-10.233	1.00	0.00
ATOM 647	2HD2	ASN	A	46	147.413	14.471	-9.125	1.00	0.00
ATOM 648	N	GLU	A	47	150.105	11.406	-8.378	1.00	0.00
ATOM 649	CA	GLU	A	47	149.205	10.262	-8.289	1.00	0.00
ATOM 650	C	GLU	A	47	148.956	9.884	-6.833	1.00	0.00
ATOM 651	O	GLU	A	47	149.896	9.621	-6.083	1.00	0.00
ATOM 652	CB	GLU	A	47	149.782	9.066	-9.049	1.00	0.00
ATOM 653	CG	GLU	A	47	151.289	8.916	-8.907	1.00	0.00
ATOM 654	CD	GLU	A	47	151.881	7.979	-9.941	1.00	0.00
ATOM 655	OE1	GLU	A	47	152.122	8.429	-11.081	1.00	0.00
ATOM 656	OE2	GLU	A	47	152.104	6.795	-9.612	1.00	0.00
ATOM 657	H	GLU	A	47	150.599	11.686	-7.580	1.00	0.00
ATOM 658	HA	GLU	A	47	148.266	10.545	-8.740	1.00	0.00

ATOM 659	1HB	GLU A	47	149.317	8.163	-8.682	1.00	0.00
ATOM 660	2HB	GLU A	47	149.550	9.176	-10.099	1.00	0.00
ATOM 661	1HG	GLU A	47	151.746	9.887	-9.021	1.00	0.00
ATOM 662	2HG	GLU A	47	151.509	8.529	-7.924	1.00	0.00
ATOM 663	N	VAL A	48	147.688	9.850	-6.439	1.00	0.00
ATOM 664	CA	VAL A	48	147.331	9.494	-5.072	1.00	0.00
ATOM 665	C	VAL A	48	147.655	8.030	-4.795	1.00	0.00
ATOM 666	O	VAL A	48	146.912	7.133	-5.191	1.00	0.00
ATOM 667	CB	VAL A	48	145.835	9.739	-4.796	1.00	0.00
ATOM 668	CG1	VAL A	48	145.527	9.554	-3.319	1.00	0.00
ATOM 669	CG2	VAL A	48	145.427	11.128	-5.265	1.00	0.00
ATOM 670	H	VAL A	48	146.979	10.064	-7.080	1.00	0.00
ATOM 671	HA	VAL A	48	147.908	10.113	-4.401	1.00	0.00
ATOM 672	HB	VAL A	48	145.263	9.012	-5.353	1.00	0.00
ATOM 673	1HG1	VAL A	48	145.685	8.522	-3.044	1.00	0.00
ATOM 674	2HG1	VAL A	48	144.498	9.824	-3.129	1.00	0.00
ATOM 675	3HG1	VAL A	48	146.178	10.186	-2.733	1.00	0.00
ATOM 676	1HG2	VAL A	48	145.171	11.092	-6.314	1.00	0.00
ATOM 677	2HG2	VAL A	48	146.248	11.813	-5.118	1.00	0.00
ATOM 678	3HG2	VAL A	48	144.572	11.462	-4.697	1.00	0.00
ATOM 679	N	LEU A	49	148.771	7.795	-4.114	1.00	0.00
ATOM 680	CA	LEU A	49	149.196	6.439	-3.787	1.00	0.00
ATOM 681	C	LEU A	49	149.018	6.158	-2.301	1.00	0.00
ATOM 682	O	LEU A	49	149.659	6.789	-1.460	1.00	0.00
ATOM 683	CB	LEU A	49	150.657	6.228	-4.185	1.00	0.00
ATOM 684	CG	LEU A	49	150.989	6.568	-5.640	1.00	0.00
ATOM 685	CD1	LEU A	49	152.472	6.871	-5.792	1.00	0.00
ATOM 686	CD2	LEU A	49	150.580	5.427	-6.559	1.00	0.00
ATOM 687	H	LEU A	49	149.325	8.551	-3.824	1.00	0.00

ATOM 688	HA	LEU A	49	148.577	5.754	-4.347	1.00	0.00
ATOM 689	1HB	LEU A	49	151.275	6.841	-3.544	1.00	0.00
ATOM 690	2HB	LEU A	49	150.909	5.192	-4.016	1.00	0.00
ATOM 691	HG	LEU A	49	150.437	7.449	-5.931	1.00	0.00
ATOM 692	1HD1	LEU A	49	152.882	7.153	-4.833	1.00	0.00
ATOM 693	2HD1	LEU A	49	152.604	7.682	-6.492	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.984	5.993	-6.157	1.00	0.00
ATOM 695	1HD2	LEU A	49	149.667	4.980	-6.195	1.00	0.00
ATOM 696	2HD2	LEU A	49	151.362	4.682	-6.578	1.00	0.00
ATOM 697	3HD2	LEU A	49	150.421	5.808	-7.556	1.00	0.00
ATOM 698	N	ALA A	50	148.145	5.210	-1.983	1.00	0.00
ATOM 699	CA	ALA A	50	147.887	4.849	-0.596	1.00	0.00
ATOM 700	C	ALA A	50	148.794	3.707	-0.151	1.00	0.00
ATOM 701	O	ALA A	50	148.698	2.591	-0.660	1.00	0.00
ATOM 702	CB	ALA A	50	146.426	4.471	-0.412	1.00	0.00
ATOM 703	H	ALA A	50	147.665	4.741	-2.698	1.00	0.00
ATOM 704	HA	ALA A	50	148.091	5.718	0.013	1.00	0.00
ATOM 705	1HB	ALA A	50	146.071	4.857	0.531	1.00	0.00
ATOM 706	2HB	ALA A	50	146.329	3.395	-0.421	1.00	0.00
ATOM 707	3HB	ALA A	50	145.841	4.890	-1.217	1.00	0.00
ATOM 708	N	GLY A	51	149.675	3.995	0.801	1.00	0.00
ATOM 709	CA	GLY A	51	150.587	2.981	1.299	1.00	0.00
ATOM 710	C	GLY A	51	149.892	1.946	2.160	1.00	0.00
ATOM 711	O	GLY A	51	149.589	2.200	3.325	1.00	0.00
ATOM 712	H	GLY A	51	149.707	4.902	1.170	1.00	0.00
ATOM 713	1HA	GLY A	51	151.047	2.483	0.458	1.00	0.00
ATOM 714	2HA	GLY A	51	151.356	3.462	1.885	1.00	0.00
ATOM 715	N	LEU A	52	149.638	0.775	1.585	1.00	0.00
ATOM 716	CA	LEU A	52	148.973	-0.303	2.309	1.00	0.00



ATOM 717	C	LEU A	52	149.989	-1.169	3.048	1.00	0.00
ATOM 718	O	LEU A	52	151.096	-1.398	2.561	1.00	0.00
ATOM 719	CB	LEU A	52	148.157	-1.166	1.345	1.00	0.00
ATOM 720	CG	LEU A	52	146.971	-0.456	0.688	1.00	0.00
ATOM 721	CD1	LEU A	52	146.473	-1.249	-0.511	1.00	0.00
ATOM 722	CD2	LEU A	52	145.850	-0.249	1.695	1.00	0.00
ATOM 723	H	LEU A	52	149.904	0.632	0.653	1.00	0.00
ATOM 724	HA	LEU A	52	148.307	0.145	3.030	1.00	0.00
ATOM 725	1HB	LEU A	52	148.816	-1.520	0.565	1.00	0.00
ATOM 726	2HB	LEU A	52	147.780	-2.018	1.889	1.00	0.00
ATOM 727	HG	LEU A	52	147.291	0.514	0.337	1.00	0.00
ATOM 728	1HD1	LEU A	52	147.292	-1.809	-0.937	1.00	0.00
ATOM 729	2HD1	LEU A	52	146.077	-0.569	-1.252	1.00	0.00
ATOM 730	3HD1	LEU A	52	145.696	-1.929	-0.195	1.00	0.00
ATOM 731	1HD2	LEU A	52	145.336	-1.185	1.860	1.00	0.00
ATOM 732	2HD2	LEU A	52	145.154	0.482	1.314	1.00	0.00
ATOM 733	3HD2	LEU A	52	146.266	0.102	2.628	1.00	0.00
ATOM 734	N	GLU A	53	149.603	-1.646	4.227	1.00	0.00
ATOM 735	CA	GLU A	53	150.479	-2.487	5.035	1.00	0.00
ATOM 736	C	GLU A	53	149.945	-3.914	5.110	1.00	0.00
ATOM 737	O	GLU A	53	148.905	-4.167	5.719	1.00	0.00
ATOM 738	CB	GLU A	53	150.619	-1.908	6.444	1.00	0.00
ATOM 739	CG	GLU A	53	151.548	-2.709	7.342	1.00	0.00
ATOM 740	CD	GLU A	53	151.003	-2.872	8.747	1.00	0.00
ATOM 741	OE1	GLU A	53	150.405	-3.929	9.034	1.00	0.00
ATOM 742	OE2	GLU A	53	151.176	-1.940	9.563	1.00	0.00
ATOM 743	H	GLU A	53	148.708	-1.428	4.562	1.00	0.00
ATOM 744	HA	GLU A	53	151.451	-2.503	4.564	1.00	0.00
ATOM 745	1HB	GLU A	53	151.004	-0.902	6.370	1.00	0.00

ATOM 746	2HB	GLU A	53	149.644	-1.877	6.907	1.00	0.00
ATOM 747	1HG	GLU A	53	151.686	-3.690	6.911	1.00	0.00
ATOM 748	2HG	GLU A	53	152.500	-2.203	7.396	1.00	0.00
ATOM 749	N	LEU A	54	150.663	-4.842	4.488	1.00	0.00
ATOM 750	CA	LEU A	54	150.262	-6.244	4.484	1.00	0.00
ATOM 751	C	LEU A	54	150.392	-6.851	5.878	1.00	0.00
ATOM 752	O	LEU A	54	151.214	-6.411	6.682	1.00	0.00
ATOM 753	CB	LEU A	54	151.110	-7.037	3.488	1.00	0.00
ATOM 754	CG	LEU A	54	151.206	-6.425	2.090	1.00	0.00
ATOM 755	CD1	LEU A	54	152.397	-6.999	1.338	1.00	0.00
ATOM 756	CD2	LEU A	54	149.919	-6.664	1.315	1.00	0.00
ATOM 757	H	LEU A	54	151.483	-4.580	4.020	1.00	0.00
ATOM 758	HA	LEU A	54	149.227	-6.292	4.180	1.00	0.00
ATOM 759	1HB	LEU A	54	152.108	-7.127	3.890	1.00	0.00
ATOM 760	2HB	LEU A	54	150.687	-8.026	3.396	1.00	0.00
ATOM 761	HG	LEU A	54	151.352	-5.358	2.180	1.00	0.00
ATOM 762	1HD1	LEU A	54	152.143	-7.976	0.952	1.00	0.00
ATOM 763	2HD1	LEU A	54	153.239	-7.086	2.009	1.00	0.00
ATOM 764	3HD1	LEU A	54	152.656	-6.345	0.519	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.250	-5.828	1.463	1.00	0.00
ATOM 766	2HD2	LEU A	54	149.448	-7.569	1.667	1.00	0.00
ATOM 767	3HD2	LEU A	54	150.145	-6.761	0.263	1.00	0.00
ATOM 768	N	GLU A	55	149.577	-7.864	6.156	1.00	0.00
ATOM 769	CA	GLU A	55	149.603	-8.531	7.451	1.00	0.00
ATOM 770	C	GLU A	55	150.652	-9.638	7.472	1.00	0.00
ATOM 771	O	GLU A	55	151.247	-9.925	8.511	1.00	0.00
ATOM 772	CB	GLU A	55	148.225	-9.112	7.777	1.00	0.00
ATOM 773	CG	GLU A	55	147.239	-8.081	8.300	1.00	0.00
ATOM 774	CD	GLU A	55	147.170	-8.058	9.815	1.00	0.00

ATOM 775	OE1	GLU A	55	146.195	-8.603	10.374	1.00	0.00
ATOM 776	OE2	GLU A	55	148.091	-7.495	10.444	1.00	0.00
ATOM 777	H	GLU A	55	148.945	-8.169	5.473	1.00	0.00
ATOM 778	HA	GLU A	55	149.859	-7.795	8.199	1.00	0.00
ATOM 779	1HB	GLU A	55	147.812	-9.551	6.880	1.00	0.00
ATOM 780	2HB	GLU A	55	148.339	-9.882	8.525	1.00	0.00
ATOM 781	1HG	GLU A	55	147.543	-7.103	7.955	1.00	0.00
ATOM 782	2HG	GLU A	55	146.258	-8.311	7.913	1.00	0.00
ATOM 783	N	ASP A	56	150.874	-10.258	6.317	1.00	0.00
ATOM 784	CA	ASP A	56	151.851	-11.333	6.202	1.00	0.00
ATOM 785	C	ASP A	56	153.173	-10.811	5.649	1.00	0.00
ATOM 786	O	ASP A	56	153.208	-10.169	4.599	1.00	0.00
ATOM 787	CB	ASP A	56	151.313	-12.446	5.301	1.00	0.00
ATOM 788	CG	ASP A	56	150.352	-13.365	6.029	1.00	0.00
ATOM 789	OD1	ASP A	56	149.236	-13.588	5.512	1.00	0.00
ATOM 790	OD2	ASP A	56	150.715	-13.864	7.114	1.00	0.00
ATOM 791	H	ASP A	56	150.368	-9.984	5.523	1.00	0.00
ATOM 792	HA	ASP A	56	152.022	-11.733	7.190	1.00	0.00
ATOM 793	1HB	ASP A	56	150.793	-12.004	4.464	1.00	0.00
ATOM 794	2HB	ASP A	56	152.140	-13.036	4.934	1.00	0.00
ATOM 795	N	GLU A	57	154.259	-11.088	6.363	1.00	0.00
ATOM 796	CA	GLU A	57	155.584	-10.645	5.943	1.00	0.00
ATOM 797	C	GLU A	57	156.033	-11.387	4.689	1.00	0.00
ATOM 798	O	GLU A	57	156.555	-12.499	4.766	1.00	0.00
ATOM 799	CB	GLU A	57	156.597	-10.862	7.068	1.00	0.00
ATOM 800	CG	GLU A	57	156.634	-9.728	8.079	1.00	0.00
ATOM 801	CD	GLU A	57	157.934	-9.686	8.859	1.00	0.00
ATOM 802	OE1	GLU A	57	158.886	-9.025	8.391	1.00	0.00
ATOM 803	OE2	GLU A	57	158.001	-10.312	9.938	1.00	0.00

ATOM 804	H	GLU A	57	154.167	-11.603	7.192	1.00	0.00
ATOM 805	HA	GLU A	57	155.525	-9.590	5.722	1.00	0.00
ATOM 806	1HB	GLU A	57	156.348	-11.774	7.591	1.00	0.00
ATOM 807	2HB	GLU A	57	157.582	-10.963	6.636	1.00	0.00
ATOM 808	1HG	GLU A	57	156.517	-8.792	7.557	1.00	0.00
ATOM 809	2HG	GLU A	57	155.819	-9.856	8.776	1.00	0.00
ATOM 810	N	CYS A	58	155.825	-10.764	3.533	1.00	0.00
ATOM 811	CA	CYS A	58	156.210	-11.364	2.261	1.00	0.00
ATOM 812	C	CYS A	58	157.455	-10.689	1.695	1.00	0.00
ATOM 813	O	CYS A	58	157.512	-9.465	1.580	1.00	0.00
ATOM 814	CB	CYS A	58	155.060	-11.263	1.258	1.00	0.00
ATOM 815	SG	CYS A	58	155.200	-12.400	-0.142	1.00	0.00
ATOM 816	H	CYS A	58	155.405	-9.879	3.536	1.00	0.00
ATOM 817	HA	CYS A	58	156.429	-12.406	2.440	1.00	0.00
ATOM 818	1HB	CYS A	58	154.131	-11.480	1.763	1.00	0.00
ATOM 819	2HB	CYS A	58	155.023	-10.257	0.864	1.00	0.00
ATOM 820	HG	CYS A	58	155.346	-13.282	0.206	1.00	0.00
ATOM 821	N	ALA A	59	158.450	-11.497	1.343	1.00	0.00
ATOM 822	CA	ALA A	59	159.695	-10.978	0.787	1.00	0.00
ATOM 823	C	ALA A	59	159.453	-10.283	-0.548	1.00	0.00
ATOM 824	O	ALA A	59	158.956	-10.893	-1.495	1.00	0.00
ATOM 825	CB	ALA A	59	160.709	-12.100	0.625	1.00	0.00
ATOM 826	H	ALA A	59	158.345	-12.464	1.458	1.00	0.00
ATOM 827	HA	ALA A	59	160.097	-10.259	1.487	1.00	0.00
ATOM 828	1HB	ALA A	59	161.226	-12.256	1.561	1.00	0.00
ATOM 829	2HB	ALA A	59	161.421	-11.833	-0.141	1.00	0.00
ATOM 830	3HB	ALA A	59	160.197	-13.008	0.341	1.00	0.00
ATOM 831	N	GLY A	60	159.808	-9.005	-0.618	1.00	0.00
ATOM 832	CA	GLY A	60	159.622	-8.249	-1.842	1.00	0.00

ATOM 833	C	GLY A	60	159.105	-6.847	-1.587	1.00	0.00
ATOM 834	O	GLY A	60	159.364	-5.931	-2.367	1.00	0.00
ATOM 835	H	GLY A	60	160.200	-8.570	0.169	1.00	0.00
ATOM 836	1HA	GLY A	60	160.568	-8.184	-2.359	1.00	0.00
ATOM 837	2HA	GLY A	60	158.916	-8.772	-2.471	1.00	0.00
ATOM 838	N	CYS A	61	158.372	-6.679	-0.491	1.00	0.00
ATOM 839	CA	CYS A	61	157.818	-5.378	-0.135	1.00	0.00
ATOM 840	C	CYS A	61	158.817	-4.564	0.680	1.00	0.00
ATOM 841	O	CYS A	61	159.828	-5.091	1.147	1.00	0.00
ATOM 842	CB	CYS A	61	156.519	-5.553	0.656	1.00	0.00
ATOM 843	SG	CYS A	61	155.273	-6.557	-0.185	1.00	0.00
ATOM 844	H	CYS A	61	158.200	-7.447	0.092	1.00	0.00
ATOM 845	HA	CYS A	61	157.602	-4.848	-1.050	1.00	0.00
ATOM 846	1HB	CYS A	61	156.742	-6.029	1.598	1.00	0.00
ATOM 847	2HB	CYS A	61	156.087	-4.581	0.843	1.00	0.00
ATOM 848	HG	CYS A	61	154.755	-7.009	0.485	1.00	0.00
ATOM 849	N	THR A	62	158.529	-3.278	0.848	1.00	0.00
ATOM 850	CA	THR A	62	159.402	-2.391	1.608	1.00	0.00
ATOM 851	C	THR A	62	158.917	-2.249	3.047	1.00	0.00
ATOM 852	O	THR A	62	157.942	-2.885	3.448	1.00	0.00
ATOM 853	CB	THR A	62	159.471	-1.016	0.942	1.00	0.00
ATOM 854	OG1	THR A	62	158.253	-0.718	0.283	1.00	0.00
ATOM 855	CG2	THR A	62	160.584	-0.898	-0.076	1.00	0.00
ATOM 856	H	THR A	62	157.709	-2.916	0.453	1.00	0.00
ATOM 857	HA	THR A	62	160.390	-2.827	1.616	1.00	0.00
ATOM 858	HB	THR A	62	159.637	-0.267	1.703	1.00	0.00
ATOM 859	HG1	THR A	62	158.243	0.209	0.033	1.00	0.00
ATOM 860	1HG2	THR A	62	161.538	-0.993	0.421	1.00	0.00
ATOM 861	2HG2	THR A	62	160.526	0.064	-0.563	1.00	0.00

ATOM 862	3HG2	THR	A	62	160.483	-1.681	-0.812	1.00	0.00
ATOM 863	N	ASP	A	63	159.602	-1.412	3.818	1.00	0.00
ATOM 864	CA	ASP	A	63	159.240	-1.185	5.212	1.00	0.00
ATOM 865	C	ASP	A	63	158.612	0.192	5.394	1.00	0.00
ATOM 866	O	ASP	A	63	158.751	0.814	6.448	1.00	0.00
ATOM 867	CB	ASP	A	63	160.473	-1.319	6.108	1.00	0.00
ATOM 868	CG	ASP	A	63	161.586	-0.372	5.706	1.00	0.00
ATOM 869	OD1	ASP	A	63	162.107	-0.513	4.580	1.00	0.00
ATOM 870	OD2	ASP	A	63	161.935	0.512	6.517	1.00	0.00
ATOM 871	H	ASP	A	63	160.370	-0.933	3.440	1.00	0.00
ATOM 872	HA	ASP	A	63	158.518	-1.938	5.493	1.00	0.00
ATOM 873	1HB	ASP	A	63	160.193	-1.104	7.129	1.00	0.00
ATOM 874	2HB	ASP	A	63	160.846	-2.331	6.048	1.00	0.00
ATOM 875	N	GLY	A	64	157.919	0.662	4.363	1.00	0.00
ATOM 876	CA	GLY	A	64	157.278	1.963	4.429	1.00	0.00
ATOM 877	C	GLY	A	64	158.053	3.031	3.681	1.00	0.00
ATOM 878	O	GLY	A	64	158.129	4.177	4.125	1.00	0.00
ATOM 879	H	GLY	A	64	157.841	0.122	3.548	1.00	0.00
ATOM 880	1HA	GLY	A	64	156.289	1.887	4.004	1.00	0.00
ATOM 881	2HA	GLY	A	64	157.192	2.256	5.466	1.00	0.00
ATOM 882	N	THR	A	65	158.628	2.654	2.544	1.00	0.00
ATOM 883	CA	THR	A	65	159.401	3.587	1.733	1.00	0.00
ATOM 884	C	THR	A	65	159.066	3.428	0.253	1.00	0.00
ATOM 885	O	THR	A	65	159.267	2.360	-0.328	1.00	0.00
ATOM 886	CB	THR	A	65	160.898	3.371	1.955	1.00	0.00
ATOM 887	OG1	THR	A	65	161.198	1.990	2.046	1.00	0.00
ATOM 888	CG2	THR	A	65	161.419	4.037	3.210	1.00	0.00
ATOM 889	H	THR	A	65	158.532	1.726	2.243	1.00	0.00
ATOM 890	HA	THR	A	65	159.141	4.589	2.042	1.00	0.00

ATOM 891	HB	THR A	65	161.439	3.780	1.113	1.00	0.00
ATOM 892	HG1	THR A	65	160.877	1.539	1.261	1.00	0.00
ATOM 893	1HG2	THR A	65	161.665	5.067	2.995	1.00	0.00
ATOM 894	2HG2	THR A	65	162.303	3.520	3.551	1.00	0.00
ATOM 895	3HG2	THR A	65	160.661	4.001	3.978	1.00	0.00
ATOM 896	N	PHE A	66	158.556	4.496	-0.352	1.00	0.00
ATOM 897	CA	PHE A	66	158.193	4.473	-1.764	1.00	0.00
ATOM 898	C	PHE A	66	159.281	5.122	-2.615	1.00	0.00
ATOM 899	O	PHE A	66	159.440	6.343	-2.613	1.00	0.00
ATOM 900	CB	PHE A	66	156.862	5.195	-1.982	1.00	0.00
ATOM 901	CG	PHE A	66	156.296	5.008	-3.360	1.00	0.00
ATOM 902	CD1	PHE A	66	155.867	3.760	-3.784	1.00	0.00
ATOM 903	CD2	PHE A	66	156.194	6.080	-4.233	1.00	0.00
ATOM 904	CE1	PHE A	66	155.346	3.585	-5.052	1.00	0.00
ATOM 905	CE2	PHE A	66	155.674	5.910	-5.502	1.00	0.00
ATOM 906	CZ	PHE A	66	155.249	4.662	-5.912	1.00	0.00
ATOM 907	H	PHE A	66	158.419	5.317	0.164	1.00	0.00
ATOM 908	HA	PHE A	66	158.086	3.442	-2.063	1.00	0.00
ATOM 909	1HB	PHE A	66	156.138	4.821	-1.272	1.00	0.00
ATOM 910	2HB	PHE A	66	157.004	6.254	-1.820	1.00	0.00
ATOM 911	HD1	PHE A	66	155.942	2.918	-3.112	1.00	0.00
ATOM 912	HD2	PHE A	66	156.525	7.056	-3.913	1.00	0.00
ATOM 913	HE1	PHE A	66	155.016	2.608	-5.371	1.00	0.00
ATOM 914	HE2	PHE A	66	155.599	6.754	-6.172	1.00	0.00
ATOM 915	HZ	PHE A	66	154.843	4.527	-6.904	1.00	0.00
ATOM 916	N	ARG A	67	160.027	4.296	-3.341	1.00	0.00
ATOM 917	CA	ARG A	67	161.100	4.789	-4.198	1.00	0.00
ATOM 918	C	ARG A	67	162.157	5.521	-3.378	1.00	0.00
ATOM 919	O	ARG A	67	162.675	6.557	-3.798	1.00	0.00

ATOM 920	CB	ARG A	67	160.534	5.719	-5.274	1.00	0.00
ATOM 921	CG	ARG A	67	159.459	5.073	-6.133	1.00	0.00
ATOM 922	CD	ARG A	67	159.356	5.744	-7.493	1.00	0.00
ATOM 923	NE	ARG A	67	159.127	4.777	-8.564	1.00	0.00
ATOM 924	CZ	ARG A	67	159.155	5.084	-9.859	1.00	0.00
ATOM 925	NH1	ARG A	67	159.400	6.331	-10.247	1.00	0.00
ATOM 926	NH2	ARG A	67	158.938	4.145	-10.769	1.00	0.00
ATOM 927	H	ARG A	67	159.851	3.333	-3.302	1.00	0.00
ATOM 928	HA	ARG A	67	161.559	3.937	-4.677	1.00	0.00
ATOM 929	1HB	ARG A	67	160.107	6.587	-4.794	1.00	0.00
ATOM 930	2HB	ARG A	67	161.340	6.035	-5.920	1.00	0.00
ATOM 931	1HG	ARG A	67	159.705	4.031	-6.275	1.00	0.00
ATOM 932	2HG	ARG A	67	158.509	5.156	-5.626	1.00	0.00
ATOM 933	1HD	ARG A	67	158.534	6.444	-7.473	1.00	0.00
ATOM 934	2HD	ARG A	67	160.275	6.275	-7.690	1.00	0.00
ATOM 935	HE	ARG A	67	158.944	3.850	-8.305	1.00	0.00
ATOM 936	1HH1	ARG A	67	159.565	7.044	-9.566	1.00	0.00
ATOM 937	2HH1	ARG A	67	159.421	6.555	-11.221	1.00	0.00
ATOM 938	1HH2	ARG A	67	158.753	3.205	-10.481	1.00	0.00
ATOM 939	2HH2	ARG A	67	158.958	4.375	-11.741	1.00	0.00
ATOM 940	N	GLY A	68	162.473	4.977	-2.208	1.00	0.00
ATOM 941	CA	GLY A	68	163.468	5.592	-1.349	1.00	0.00
ATOM 942	C	GLY A	68	162.935	6.814	-0.627	1.00	0.00
ATOM 943	O	GLY A	68	163.691	7.728	-0.297	1.00	0.00
ATOM 944	H	GLY A	68	162.027	4.152	-1.926	1.00	0.00
ATOM 945	1HA	GLY A	68	163.792	4.868	-0.617	1.00	0.00
ATOM 946	2HA	GLY A	68	164.315	5.885	-1.950	1.00	0.00
ATOM 947	N	THR A	69	161.629	6.830	-0.382	1.00	0.00
ATOM 948	CA	THR A	69	160.994	7.950	0.305	1.00	0.00



ATOM 949	C	THR A	69	160.067	7.454	1.411	1.00	0.00
ATOM 950	O	THR A	69	158.900	7.147	1.164	1.00	0.00
ATOM 951	CB	THR A	69	160.209	8.807	-0.689	1.00	0.00
ATOM 952	OG1	THR A	69	160.975	9.048	-1.855	1.00	0.00
ATOM 953	CG2	THR A	69	159.796	10.148	-0.125	1.00	0.00
ATOM 954	H	THR A	69	161.078	6.073	-0.669	1.00	0.00
ATOM 955	HA	THR A	69	161.774	8.551	0.749	1.00	0.00
ATOM 956	HB	THR A	69	159.312	8.277	-0.974	1.00	0.00
ATOM 957	HG1	THR A	69	160.699	8.445	-2.550	1.00	0.00
ATOM 958	1HG2	THR A	69	160.366	10.356	0.768	1.00	0.00
ATOM 959	2HG2	THR A	69	158.743	10.129	0.117	1.00	0.00
ATOM 960	3HG2	THR A	69	159.982	10.920	-0.858	1.00	0.00
ATOM 961	N	ARG A	70	160.593	7.377	2.629	1.00	0.00
ATOM 962	CA	ARG A	70	159.811	6.918	3.771	1.00	0.00
ATOM 963	C	ARG A	70	158.618	7.835	4.018	1.00	0.00
ATOM 964	O	ARG A	70	158.749	9.059	4.005	1.00	0.00
ATOM 965	CB	ARG A	70	160.689	6.855	5.023	1.00	0.00
ATOM 966	CG	ARG A	70	159.948	6.370	6.260	1.00	0.00
ATOM 967	CD	ARG A	70	160.069	7.358	7.410	1.00	0.00
ATOM 968	NE	ARG A	70	160.228	6.685	8.697	1.00	0.00
ATOM 969	CZ	ARG A	70	161.380	6.178	9.131	1.00	0.00
ATOM 970	NH1	ARG A	70	162.475	6.264	8.385	1.00	0.00
ATOM 971	NH2	ARG A	70	161.437	5.582	10.315	1.00	0.00
ATOM 972	H	ARG A	70	161.529	7.635	2.762	1.00	0.00
ATOM 973	HA	ARG A	70	159.448	5.926	3.546	1.00	0.00
ATOM 974	1HB	ARG A	70	161.513	6.181	4.838	1.00	0.00
ATOM 975	2HB	ARG A	70	161.079	7.841	5.225	1.00	0.00
ATOM 976	1HG	ARG A	70	158.904	6.245	6.016	1.00	0.00
ATOM 977	2HG	ARG A	70	160.363	5.421	6.567	1.00	0.00

ATOM 978	1HD	ARG A	70	160.928	7.989	7.237	1.00	0.00
ATOM 979	2HD	ARG A	70	159.177	7.966	7.440	1.00	0.00
ATOM 980	HE	ARG A	70	159.436	6.606	9.267	1.00	0.00
ATOM 981	1HH1	ARG A	70	162.438	6.711	7.492	1.00	0.00
ATOM 982	2HH1	ARG A	70	163.337	5.881	8.717	1.00	0.00
ATOM 983	1HH2	ARG A	70	160.615	5.515	10.880	1.00	0.00
ATOM 984	2HH2	ARG A	70	162.303	5.202	10.641	1.00	0.00
ATOM 985	N	TYR A	71	157.454	7.233	4.243	1.00	0.00
ATOM 986	CA	TYR A	71	156.236	7.995	4.494	1.00	0.00
ATOM 987	C	TYR A	71	155.691	7.705	5.889	1.00	0.00
ATOM 988	O	TYR A	71	155.213	8.606	6.578	1.00	0.00
ATOM 989	CB	TYR A	71	155.177	7.661	3.442	1.00	0.00
ATOM 990	CG	TYR A	71	155.365	8.402	2.137	1.00	0.00
ATOM 991	CD1	TYR A	71	155.369	7.722	0.925	1.00	0.00
ATOM 992	CD2	TYR A	71	155.540	9.780	2.117	1.00	0.00
ATOM 993	CE1	TYR A	71	155.542	8.396	-0.270	1.00	0.00
ATOM 994	CE2	TYR A	71	155.713	10.460	0.926	1.00	0.00
ATOM 995	CZ	TYR A	71	155.713	9.764	-0.263	1.00	0.00
ATOM 996	OH	TYR A	71	155.885	10.437	-1.451	1.00	0.00
ATOM 997	H	TYR A	71	157.415	6.255	4.240	1.00	0.00
ATOM 998	HA	TYR A	71	156.481	9.044	4.426	1.00	0.00
ATOM 999	1HB	TYR A	71	155.209	6.604	3.230	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.202	7.916	3.831	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.235	6.651	0.924	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.541	10.323	3.050	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.541	7.849	-1.202	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.847	11.532	0.931	1.00	0.00
ATOM 1005	HH	TYR A	71	155.181	10.199	-2.060	1.00	0.00
ATOM 1006	N	PHE A	72	155.770	6.445	6.299	1.00	0.00

ATOM 1007	CA	PHE A	72	155.285	6.036	7.613	1.00	0.00
ATOM 1008	C	PHE A	72	156.210	4.994	8.234	1.00	0.00
ATOM 1009	O	PHE A	72	157.229	4.626	7.649	1.00	0.00
ATOM 1010	CB	PHE A	72	153.866	5.476	7.505	1.00	0.00
ATOM 1011	CG	PHE A	72	153.694	4.488	6.386	1.00	0.00
ATOM 1012	CD1	PHE A	72	153.520	4.923	5.082	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.705	3.126	6.639	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.360	4.017	4.050	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.546	2.215	5.612	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.374	2.662	4.316	1.00	0.00
ATOM 1017	H	PHE A	72	156.163	5.772	5.705	1.00	0.00
ATOM 1018	HA	PHE A	72	155.270	6.910	8.247	1.00	0.00
ATOM 1019	1HB	PHE A	72	153.612	4.977	8.429	1.00	0.00
ATOM 1020	2HB	PHE A	72	153.176	6.290	7.341	1.00	0.00
ATOM 1021	HD1	PHE A	72	153.509	5.983	4.874	1.00	0.00
ATOM 1022	HD2	PHE A	72	153.839	2.776	7.652	1.00	0.00
ATOM 1023	HE1	PHE A	72	153.225	4.369	3.039	1.00	0.00
ATOM 1024	HE2	PHE A	72	153.557	1.156	5.822	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.250	1.952	3.511	1.00	0.00
ATOM 1026	N	THR A	73	155.849	4.521	9.422	1.00	0.00
ATOM 1027	CA	THR A	73	156.646	3.521	10.122	1.00	0.00
ATOM 1028	C	THR A	73	155.862	2.224	10.297	1.00	0.00
ATOM 1029	O	THR A	73	154.872	2.180	11.028	1.00	0.00
ATOM 1030	CB	THR A	73	157.085	4.053	11.487	1.00	0.00
ATOM 1031	OG1	THR A	73	157.756	3.047	12.225	1.00	0.00
ATOM 1032	CG2	THR A	73	155.934	4.552	12.333	1.00	0.00
ATOM 1033	H	THR A	73	155.026	4.853	9.839	1.00	0.00
ATOM 1034	HA	THR A	73	157.523	3.320	9.526	1.00	0.00
ATOM 1035	HB	THR A	73	157.767	4.877	11.339	1.00	0.00

ATOM 1036	HG1	THR A	73	158.668	3.311	12.370	1.00	0.00
ATOM 1037	1HG2	THR A	73	156.046	5.613	12.504	1.00	0.00
ATOM 1038	2HG2	THR A	73	155.932	4.033	13.281	1.00	0.00
ATOM 1039	3HG2	THR A	73	155.002	4.368	11.819	1.00	0.00
ATOM 1040	N	CYS A	74	156.311	1.172	9.622	1.00	0.00
ATOM 1041	CA	CYS A	74	155.651	-0.126	9.704	1.00	0.00
ATOM 1042	C	CYS A	74	156.672	-1.259	9.654	1.00	0.00
ATOM 1043	O	CYS A	74	157.867	-1.025	9.475	1.00	0.00
ATOM 1044	CB	CYS A	74	154.644	-0.282	8.562	1.00	0.00
ATOM 1045	SG	CYS A	74	152.993	0.348	8.944	1.00	0.00
ATOM 1046	H	CYS A	74	157.105	1.270	9.056	1.00	0.00
ATOM 1047	HA	CYS A	74	155.125	-0.172	10.644	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.007	0.252	7.697	1.00	0.00
ATOM 1049	2HB	CYS A	74	154.548	-1.330	8.318	1.00	0.00
ATOM 1050	HG	CYS A	74	153.037	0.799	9.791	1.00	0.00
ATOM 1051	N	ALA A	75	156.192	-2.488	9.816	1.00	0.00
ATOM 1052	CA	ALA A	75	157.063	-3.657	9.791	1.00	0.00
ATOM 1053	C	ALA A	75	157.708	-3.832	8.420	1.00	0.00
ATOM 1054	O	ALA A	75	157.169	-3.385	7.408	1.00	0.00
ATOM 1055	CB	ALA A	75	156.281	-4.906	10.171	1.00	0.00
ATOM 1056	H	ALA A	75	155.231	-2.611	9.956	1.00	0.00
ATOM 1057	HA	ALA A	75	157.840	-3.510	10.527	1.00	0.00
ATOM 1058	1HB	ALA A	75	155.259	-4.806	9.836	1.00	0.00
ATOM 1059	2HB	ALA A	75	156.298	-5.028	11.244	1.00	0.00
ATOM 1060	3HB	ALA A	75	156.730	-5.769	9.703	1.00	0.00
ATOM 1061	N	LEU A	76	158.864	-4.486	8.395	1.00	0.00
ATOM 1062	CA	LEU A	76	159.583	-4.720	7.148	1.00	0.00
ATOM 1063	C	LEU A	76	158.884	-5.784	6.309	1.00	0.00
ATOM 1064	O	LEU A	76	158.277	-6.711	6.844	1.00	0.00

ATOM 1065	CB	LEU A	76	161.023	-5.147	7.437	1.00	0.00
ATOM 1066	CG	LEU A	76	161.915	-4.055	8.031	1.00	0.00
ATOM 1067	CD1	LEU A	76	161.985	-4.187	9.545	1.00	0.00
ATOM 1068	CD2	LEU A	76	163.309	-4.116	7.425	1.00	0.00
ATOM 1069	H	LEU A	76	159.244	-4.819	9.235	1.00	0.00
ATOM 1070	HA	LEU A	76	159.597	-3.794	6.595	1.00	0.00
ATOM 1071	1HB	LEU A	76	160.998	-5.979	8.127	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.469	-5.483	6.513	1.00	0.00
ATOM 1073	HG	LEU A	76	161.491	-3.088	7.800	1.00	0.00
ATOM 1074	1HD1	LEU A	76	161.129	-4.740	9.897	1.00	0.00
ATOM 1075	2HD1	LEU A	76	161.987	-3.203	9.991	1.00	0.00
ATOM 1076	3HD1	LEU A	76	162.890	-4.708	9.819	1.00	0.00
ATOM 1077	1HD2	LEU A	76	163.238	-4.403	6.386	1.00	0.00
ATOM 1078	2HD2	LEU A	76	163.903	-4.844	7.959	1.00	0.00
ATOM 1079	3HD2	LEU A	76	163.778	-3.146	7.499	1.00	0.00
ATOM 1080	N	LYS A	77	158.974	-5.644	4.990	1.00	0.00
ATOM 1081	CA	LYS A	77	158.350	-6.593	4.075	1.00	0.00
ATOM 1082	C	LYS A	77	156.836	-6.610	4.257	1.00	0.00
ATOM 1083	O	LYS A	77	156.193	-7.648	4.097	1.00	0.00
ATOM 1084	CB	LYS A	77	158.918	-7.997	4.297	1.00	0.00
ATOM 1085	CG	LYS A	77	160.436	-8.038	4.345	1.00	0.00
ATOM 1086	CD	LYS A	77	161.044	-7.809	2.971	1.00	0.00
ATOM 1087	CE	LYS A	77	162.497	-7.372	3.069	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.335	-7.988	2.004	1.00	0.00
ATOM 1089	H	LYS A	77	159.473	-4.884	4.623	1.00	0.00
ATOM 1090	HA	LYS A	77	158.575	-6.278	3.067	1.00	0.00
ATOM 1091	1HB	LYS A	77	158.538	-8.382	5.231	1.00	0.00
ATOM 1092	2HB	LYS A	77	158.587	-8.637	3.492	1.00	0.00
ATOM 1093	1HG	LYS A	77	160.787	-7.268	5.015	1.00	0.00

ATOM 1094	2HG	LYS A	77	160.749	-9.005	4.710	1.00	0.00
ATOM 1095	1HD	LYS A	77	160.993	-8.729	2.407	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.480	-7.041	2.462	1.00	0.00
ATOM 1097	1HE	LYS A	77	162.544	-6.298	2.975	1.00	0.00
ATOM 1098	2HE	LYS A	77	162.883	-7.667	4.034	1.00	0.00
ATOM 1099	1HZ	LYS A	77	164.058	-7.312	1.683	1.00	0.00
ATOM 1100	2HZ	LYS A	77	162.743	-8.255	1.192	1.00	0.00
ATOM 1101	3HZ	LYS A	77	163.809	-8.840	2.368	1.00	0.00
ATOM 1102	N	LYS A	78	156.273	-5.453	4.593	1.00	0.00
ATOM 1103	CA	LYS A	78	154.833	-5.336	4.796	1.00	0.00
ATOM 1104	C	LYS A	78	154.337	-3.953	4.387	1.00	0.00
ATOM 1105	O	LYS A	78	153.462	-3.379	5.035	1.00	0.00
ATOM 1106	CB	LYS A	78	154.482	-5.606	6.260	1.00	0.00
ATOM 1107	CG	LYS A	78	154.975	-6.951	6.768	1.00	0.00
ATOM 1108	CD	LYS A	78	154.548	-7.196	8.206	1.00	0.00
ATOM 1109	CE	LYS A	78	153.329	-8.101	8.279	1.00	0.00
ATOM 1110	NZ	LYS A	78	152.528	-7.854	9.510	1.00	0.00
ATOM 1111	H	LYS A	78	156.838	-4.661	4.705	1.00	0.00
ATOM 1112	HA	LYS A	78	154.350	-6.076	4.177	1.00	0.00
ATOM 1113	1HB	LYS A	78	154.920	-4.831	6.873	1.00	0.00
ATOM 1114	2HB	LYS A	78	153.408	-5.575	6.372	1.00	0.00
ATOM 1115	1HG	LYS A	78	154.567	-7.732	6.143	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.054	-6.971	6.712	1.00	0.00
ATOM 1117	1HD	LYS A	78	155.363	-7.662	8.738	1.00	0.00
ATOM 1118	2HD	LYS A	78	154.310	-6.247	8.667	1.00	0.00
ATOM 1119	1HE	LYS A	78	152.709	-7.919	7.414	1.00	0.00
ATOM 1120	2HE	LYS A	78	153.660	-9.129	8.274	1.00	0.00
ATOM 1121	1HZ	LYS A	78	151.535	-8.120	9.347	1.00	0.00
ATOM 1122	2HZ	LYS A	78	152.568	-6.849	9.768	1.00	0.00

ATOM 1123	3HZ	LYS A	78	152.903	-8.419	10.299	1.00	0.00
ATOM 1124	N	ALA A	79	154.903	-3.423	3.306	1.00	0.00
ATOM 1125	CA	ALA A	79	154.517	-2.107	2.811	1.00	0.00
ATOM 1126	C	ALA A	79	154.453	-2.093	1.287	1.00	0.00
ATOM 1127	O	ALA A	79	155.479	-1.991	0.614	1.00	0.00
ATOM 1128	CB	ALA A	79	155.491	-1.050	3.310	1.00	0.00
ATOM 1129	H	ALA A	79	155.595	-3.929	2.832	1.00	0.00
ATOM 1130	HA	ALA A	79	153.538	-1.876	3.204	1.00	0.00
ATOM 1131	1HB	ALA A	79	154.952	-0.139	3.526	1.00	0.00
ATOM 1132	2HB	ALA A	79	156.234	-0.858	2.551	1.00	0.00
ATOM 1133	3HB	ALA A	79	155.976	-1.402	4.208	1.00	0.00
ATOM 1134	N	LEU A	80	153.242	-2.196	0.749	1.00	0.00
ATOM 1135	CA	LEU A	80	153.045	-2.195	-0.696	1.00	0.00
ATOM 1136	C	LEU A	80	152.259	-0.964	-1.137	1.00	0.00
ATOM 1137	O	LEU A	80	151.060	-0.857	-0.880	1.00	0.00
ATOM 1138	CB	LEU A	80	152.312	-3.465	-1.132	1.00	0.00
ATOM 1139	CG	LEU A	80	152.003	-3.553	-2.627	1.00	0.00
ATOM 1140	CD1	LEU A	80	153.212	-4.072	-3.391	1.00	0.00
ATOM 1141	CD2	LEU A	80	150.795	-4.445	-2.870	1.00	0.00
ATOM 1142	H	LEU A	80	152.462	-2.275	1.338	1.00	0.00
ATOM 1143	HA	LEU A	80	154.018	-2.173	-1.164	1.00	0.00
ATOM 1144	1HB	LEU A	80	152.919	-4.317	-0.859	1.00	0.00
ATOM 1145	2HB	LEU A	80	151.379	-3.521	-0.592	1.00	0.00
ATOM 1146	HG	LEU A	80	151.773	-2.566	-3.000	1.00	0.00
ATOM 1147	1HD1	LEU A	80	154.113	-3.837	-2.843	1.00	0.00
ATOM 1148	2HD1	LEU A	80	153.251	-3.604	-4.364	1.00	0.00
ATOM 1149	3HD1	LEU A	80	153.131	-5.142	-3.509	1.00	0.00
ATOM 1150	1HD2	LEU A	80	149.892	-3.857	-2.792	1.00	0.00
ATOM 1151	2HD2	LEU A	80	150.775	-5.234	-2.131	1.00	0.00

ATOM 1152	3HD2	LEU A	80	150.858	-4.877	-3.857	1.00	0.00
ATOM 1153	N	PHE A	81	152.943	-0.039	-1.802	1.00	0.00
ATOM 1154	CA	PHE A	81	152.309	1.184	-2.279	1.00	0.00
ATOM 1155	C	PHE A	81	151.493	0.917	-3.540	1.00	0.00
ATOM 1156	O	PHE A	81	151.877	0.102	-4.379	1.00	0.00
ATOM 1157	CB	PHE A	81	153.364	2.255	-2.559	1.00	0.00
ATOM 1158	CG	PHE A	81	154.090	2.718	-1.328	1.00	0.00
ATOM 1159	CD1	PHE A	81	155.218	2.048	-0.880	1.00	0.00
ATOM 1160	CD2	PHE A	81	153.645	3.822	-0.619	1.00	0.00
ATOM 1161	CE1	PHE A	81	155.888	2.471	0.252	1.00	0.00
ATOM 1162	CE2	PHE A	81	154.311	4.250	0.515	1.00	0.00
ATOM 1163	CZ	PHE A	81	155.435	3.573	0.950	1.00	0.00
ATOM 1164	H	PHE A	81	153.896	-0.182	-1.977	1.00	0.00
ATOM 1165	HA	PHE A	81	151.646	1.538	-1.505	1.00	0.00
ATOM 1166	1HB	PHE A	81	154.096	1.859	-3.247	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.885	3.115	-3.006	1.00	0.00
ATOM 1168	HD1	PHE A	81	155.574	1.187	-1.426	1.00	0.00
ATOM 1169	HD2	PHE A	81	152.767	4.351	-0.958	1.00	0.00
ATOM 1170	HE1	PHE A	81	156.766	1.940	0.591	1.00	0.00
ATOM 1171	HE2	PHE A	81	153.954	5.111	1.059	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.957	3.906	1.835	1.00	0.00
ATOM 1173	N	VAL A	82	150.364	1.608	-3.667	1.00	0.00
ATOM 1174	CA	VAL A	82	149.494	1.444	-4.825	1.00	0.00
ATOM 1175	C	VAL A	82	148.612	2.671	-5.027	1.00	0.00
ATOM 1176	O	VAL A	82	148.497	3.519	-4.142	1.00	0.00
ATOM 1177	CB	VAL A	82	148.598	0.200	-4.684	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.428	-1.071	-4.779	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.827	0.243	-3.373	1.00	0.00
ATOM 1180	H	VAL A	82	150.111	2.242	-2.965	1.00	0.00



ATOM 1181	HA	VAL A	82	150.120	1.314	-5.697	1.00	0.00
ATOM 1182	HB	VAL A	82	147.885	0.200	-5.496	1.00	0.00
ATOM 1183	1HG1	VAL A	82	150.036	-1.038	-5.671	1.00	0.00
ATOM 1184	2HG1	VAL A	82	148.771	-1.927	-4.824	1.00	0.00
ATOM 1185	3HG1	VAL A	82	150.066	-1.150	-3.912	1.00	0.00
ATOM 1186	1HG2	VAL A	82	148.388	0.808	-2.643	1.00	0.00
ATOM 1187	2HG2	VAL A	82	147.675	-0.762	-3.011	1.00	0.00
ATOM 1188	3HG2	VAL A	82	146.869	0.716	-3.534	1.00	0.00
ATOM 1189	N	LYS A	83	147.991	2.760	-6.199	1.00	0.00
ATOM 1190	CA	LYS A	83	147.118	3.884	-6.518	1.00	0.00
ATOM 1191	C	LYS A	83	145.833	3.826	-5.700	1.00	0.00
ATOM 1192	O	LYS A	83	145.108	2.831	-5.732	1.00	0.00
ATOM 1193	CB	LYS A	83	146.786	3.890	-8.012	1.00	0.00
ATOM 1194	CG	LYS A	83	148.004	4.058	-8.904	1.00	0.00
ATOM 1195	CD	LYS A	83	147.623	4.036	-10.376	1.00	0.00
ATOM 1196	CE	LYS A	83	148.408	5.068	-11.171	1.00	0.00
ATOM 1197	NZ	LYS A	83	148.692	4.605	-12.557	1.00	0.00
ATOM 1198	H	LYS A	83	148.122	2.052	-6.864	1.00	0.00
ATOM 1199	HA	LYS A	83	147.645	4.793	-6.272	1.00	0.00
ATOM 1200	1HB	LYS A	83	146.305	2.957	-8.265	1.00	0.00
ATOM 1201	2HB	LYS A	83	146.104	4.703	-8.214	1.00	0.00
ATOM 1202	1HG	LYS A	83	148.476	5.002	-8.680	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.695	3.251	-8.709	1.00	0.00
ATOM 1204	1HD	LYS A	83	147.829	3.055	-10.778	1.00	0.00
ATOM 1205	2HD	LYS A	83	146.568	4.250	-10.469	1.00	0.00
ATOM 1206	1HE	LYS A	83	147.833	5.980	-11.217	1.00	0.00
ATOM 1207	2HE	LYS A	83	149.343	5.258	-10.664	1.00	0.00
ATOM 1208	1HZ	LYS A	83	147.835	4.193	-12.979	1.00	0.00
ATOM 1209	2HZ	LYS A	83	149.440	3.882	-12.546	1.00	0.00

ATOM 1210	3HZ	LYS A	83	149.006	5.404	-13.143	1.00	0.00
ATOM 1211	N	LEU A	84	145.559	4.900	-4.967	1.00	0.00
ATOM 1212	CA	LEU A	84	144.362	4.977	-4.138	1.00	0.00
ATOM 1213	C	LEU A	84	143.103	4.813	-4.985	1.00	0.00
ATOM 1214	O	LEU A	84	142.124	4.210	-4.547	1.00	0.00
ATOM 1215	CB	LEU A	84	144.324	6.314	-3.395	1.00	0.00
ATOM 1216	CG	LEU A	84	143.055	6.569	-2.580	1.00	0.00
ATOM 1217	CD1	LEU A	84	143.085	5.777	-1.283	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.896	8.055	-2.295	1.00	0.00
ATOM 1219	H	LEU A	84	146.177	5.660	-4.986	1.00	0.00
ATOM 1220	HA	LEU A	84	144.405	4.175	-3.419	1.00	0.00
ATOM 1221	1HB	LEU A	84	145.170	6.352	-2.725	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.426	7.107	-4.120	1.00	0.00
ATOM 1223	HG	LEU A	84	142.197	6.243	-3.150	1.00	0.00
ATOM 1224	1HD1	LEU A	84	142.799	4.753	-1.479	1.00	0.00
ATOM 1225	2HD1	LEU A	84	142.394	6.214	-0.577	1.00	0.00
ATOM 1226	3HD1	LEU A	84	144.083	5.798	-0.870	1.00	0.00
ATOM 1227	1HD2	LEU A	84	143.784	8.425	-1.805	1.00	0.00
ATOM 1228	2HD2	LEU A	84	142.040	8.209	-1.654	1.00	0.00
ATOM 1229	3HD2	LEU A	84	142.750	8.586	-3.224	1.00	0.00
ATOM 1230	N	LYS A	85	143.138	5.352	-6.199	1.00	0.00
ATOM 1231	CA	LYS A	85	141.999	5.264	-7.106	1.00	0.00
ATOM 1232	C	LYS A	85	141.717	3.814	-7.488	1.00	0.00
ATOM 1233	O	LYS A	85	140.589	3.461	-7.832	1.00	0.00
ATOM 1234	CB	LYS A	85	142.259	6.093	-8.365	1.00	0.00
ATOM 1235	CG	LYS A	85	143.453	5.615	-9.173	1.00	0.00
ATOM 1236	CD	LYS A	85	143.781	6.575	-10.306	1.00	0.00
ATOM 1237	CE	LYS A	85	144.955	7.474	-9.953	1.00	0.00
ATOM 1238	NZ	LYS A	85	144.679	8.301	-8.746	1.00	0.00

ATOM 1239	H	LYS A	85	143.948	5.819	-6.491	1.00	0.00
ATOM 1240	HA	LYS A	85	141.137	5.662	-6.595	1.00	0.00
ATOM 1241	1HB	LYS A	85	141.384	6.050	-8.997	1.00	0.00
ATOM 1242	2HB	LYS A	85	142.433	7.118	-8.077	1.00	0.00
ATOM 1243	1HG	LYS A	85	144.310	5.538	-8.521	1.00	0.00
ATOM 1244	2HG	LYS A	85	143.229	4.643	-9.590	1.00	0.00
ATOM 1245	1HD	LYS A	85	144.031	6.004	-11.188	1.00	0.00
ATOM 1246	2HD	LYS A	85	142.914	7.189	-10.506	1.00	0.00
ATOM 1247	1HE	LYS A	85	145.821	6.858	-9.766	1.00	0.00
ATOM 1248	2HE	LYS A	85	145.154	8.129	-10.789	1.00	0.00
ATOM 1249	1HZ	LYS A	85	145.546	8.784	-8.437	1.00	0.00
ATOM 1250	2HZ	LYS A	85	144.337	7.698	-7.970	1.00	0.00
ATOM 1251	3HZ	LYS A	85	143.953	9.015	-8.959	1.00	0.00
ATOM 1252	N	SER A	86	142.750	2.976	-7.427	1.00	0.00
ATOM 1253	CA	SER A	86	142.608	1.565	-7.767	1.00	0.00
ATOM 1254	C	SER A	86	142.494	0.710	-6.509	1.00	0.00
ATOM 1255	O	SER A	86	142.923	-0.444	-6.490	1.00	0.00
ATOM 1256	CB	SER A	86	143.800	1.100	-8.607	1.00	0.00
ATOM 1257	OG	SER A	86	143.657	1.500	-9.959	1.00	0.00
ATOM 1258	H	SER A	86	143.625	3.314	-7.147	1.00	0.00
ATOM 1259	HA	SER A	86	141.704	1.453	-8.347	1.00	0.00
ATOM 1260	1HB	SER A	86	144.707	1.531	-8.211	1.00	0.00
ATOM 1261	2HB	SER A	86	143.866	0.023	-8.568	1.00	0.00
ATOM 1262	HG	SER A	86	143.468	2.440	-9.997	1.00	0.00
ATOM 1263	N	CYS A	87	141.913	1.284	-5.460	1.00	0.00
ATOM 1264	CA	CYS A	87	141.742	0.575	-4.198	1.00	0.00
ATOM 1265	C	CYS A	87	140.267	0.304	-3.923	1.00	0.00
ATOM 1266	O	CYS A	87	139.397	1.064	-4.346	1.00	0.00
ATOM 1267	CB	CYS A	87	142.347	1.382	-3.048	1.00	0.00

ATOM 1268	SG	CYS A	87	144.153	1.474	-3.081	1.00	0.00
ATOM 1269	H	CYS A	87	141.592	2.207	-5.537	1.00	0.00
ATOM 1270	HA	CYS A	87	142.262	-0.369	-4.274	1.00	0.00
ATOM 1271	1HB	CYS A	87	141.968	2.393	-3.089	1.00	0.00
ATOM 1272	2HB	CYS A	87	142.057	0.933	-2.110	1.00	0.00
ATOM 1273	HG	CYS A	87	144.471	1.371	-2.181	1.00	0.00
ATOM 1274	N	ARG A	88	139.992	-0.786	-3.212	1.00	0.00
ATOM 1275	CA	ARG A	88	138.620	-1.156	-2.882	1.00	0.00
ATOM 1276	C	ARG A	88	138.440	-1.289	-1.372	1.00	0.00
ATOM 1277	O	ARG A	88	139.327	-1.781	-0.674	1.00	0.00
ATOM 1278	CB	ARG A	88	138.247	-2.472	-3.569	1.00	0.00
ATOM 1279	CG	ARG A	88	137.641	-2.286	-4.950	1.00	0.00
ATOM 1280	CD	ARG A	88	136.123	-2.374	-4.909	1.00	0.00
ATOM 1281	NE	ARG A	88	135.530	-2.222	-6.236	1.00	0.00
ATOM 1282	CZ	ARG A	88	135.476	-1.068	-6.897	1.00	0.00
ATOM 1283	NH1	ARG A	88	135.977	0.037	-6.359	1.00	0.00
ATOM 1284	NH2	ARG A	88	134.919	-1.019	-8.099	1.00	0.00
ATOM 1285	H	ARG A	88	140.729	-1.354	-2.903	1.00	0.00
ATOM 1286	HA	ARG A	88	137.971	-0.374	-3.246	1.00	0.00
ATOM 1287	1HB	ARG A	88	139.136	-3.077	-3.669	1.00	0.00
ATOM 1288	2HB	ARG A	88	137.533	-2.997	-2.953	1.00	0.00
ATOM 1289	1HG	ARG A	88	137.924	-1.316	-5.330	1.00	0.00
ATOM 1290	2HG	ARG A	88	138.019	-3.056	-5.606	1.00	0.00
ATOM 1291	1HD	ARG A	88	135.842	-3.335	-4.507	1.00	0.00
ATOM 1292	2HD	ARG A	88	135.749	-1.591	-4.265	1.00	0.00
ATOM 1293	HE	ARG A	88	135.152	-3.023	-6.656	1.00	0.00
ATOM 1294	1HH1	ARG A	88	136.399	0.007	-5.453	1.00	0.00
ATOM 1295	2HH1	ARG A	88	135.934	0.901	-6.861	1.00	0.00
ATOM 1296	1HH2	ARG A	88	134.539	-1.848	-8.509	1.00	0.00

ATOM 1297	2HH2	ARG A	88	134.878	-0.152	-8.596	1.00	0.00
ATOM 1298	N	PRO A	89	137.282	-0.854	-0.841	1.00	0.00
ATOM 1299	CA	PRO A	89	136.995	-0.931	0.595	1.00	0.00
ATOM 1300	C	PRO A	89	137.153	-2.347	1.140	1.00	0.00
ATOM 1301	O	PRO A	89	136.565	-3.293	0.616	1.00	0.00
ATOM 1302	CB	PRO A	89	135.534	-0.482	0.696	1.00	0.00
ATOM 1303	CG	PRO A	89	135.303	0.344	-0.521	1.00	0.00
ATOM 1304	CD	PRO A	89	136.166	-0.254	-1.596	1.00	0.00
ATOM 1305	HA	PRO A	89	137.622	-0.257	1.160	1.00	0.00
ATOM 1306	1HB	PRO A	89	134.889	-1.349	0.715	1.00	0.00
ATOM 1307	2HB	PRO A	89	135.394	0.097	1.597	1.00	0.00
ATOM 1308	1HG	PRO A	89	134.262	0.297	-0.805	1.00	0.00
ATOM 1309	2HG	PRO A	89	135.596	1.367	-0.332	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.619	-1.009	-2.142	1.00	0.00
ATOM 1311	2HD	PRO A	89	136.522	0.515	-2.265	1.00	0.00
ATOM 1312	N	ASP A	90	137.949	-2.484	2.196	1.00	0.00
ATOM 1313	CA	ASP A	90	138.183	-3.784	2.811	1.00	0.00
ATOM 1314	C	ASP A	90	137.359	-3.937	4.086	1.00	0.00
ATOM 1315	O	ASP A	90	137.749	-3.455	5.149	1.00	0.00
ATOM 1316	CB	ASP A	90	139.668	-3.964	3.127	1.00	0.00
ATOM 1317	CG	ASP A	90	140.101	-5.416	3.066	1.00	0.00
ATOM 1318	OD1	ASP A	90	139.932	-6.041	1.997	1.00	0.00
ATOM 1319	OD2	ASP A	90	140.609	-5.928	4.085	1.00	0.00
ATOM 1320	H	ASP A	90	138.389	-1.691	2.569	1.00	0.00
ATOM 1321	HA	ASP A	90	137.878	-4.544	2.107	1.00	0.00
ATOM 1322	1HB	ASP A	90	140.253	-3.403	2.413	1.00	0.00
ATOM 1323	2HB	ASP A	90	139.866	-3.589	4.120	1.00	0.00
ATOM 1324	N	SER A	91	136.220	-4.611	3.972	1.00	0.00
ATOM 1325	CA	SER A	91	135.343	-4.826	5.118	1.00	0.00

ATOM 1326	C	SER A	91	135.563	-6.209	5.723	1.00	0.00
ATOM 1327	O	SER A	91	134.646	-6.803	6.289	1.00	0.00
ATOM 1328	CB	SER A	91	133.879	-4.667	4.702	1.00	0.00
ATOM 1329	OG	SER A	91	133.091	-4.194	5.781	1.00	0.00
ATOM 1330	H	SER A	91	135.962	-4.972	3.098	1.00	0.00
ATOM 1331	HA	SER A	91	135.579	-4.079	5.859	1.00	0.00
ATOM 1332	1HB	SER A	91	133.812	-3.962	3.887	1.00	0.00
ATOM 1333	2HB	SER A	91	133.492	-5.624	4.383	1.00	0.00
ATOM 1334	HG	SER A	91	132.300	-4.732	5.861	1.00	0.00
ATOM 1335	N	ARG A	92	136.787	-6.715	5.600	1.00	0.00
ATOM 1336	CA	ARG A	92	137.126	-8.028	6.137	1.00	0.00
ATOM 1337	C	ARG A	92	137.058	-8.025	7.660	1.00	0.00
ATOM 1338	O	ARG A	92	136.757	-9.045	8.281	1.00	0.00
ATOM 1339	CB	ARG A	92	138.525	-8.444	5.677	1.00	0.00
ATOM 1340	CG	ARG A	92	138.648	-8.601	4.171	1.00	0.00
ATOM 1341	CD	ARG A	92	137.984	-9.879	3.686	1.00	0.00
ATOM 1342	NE	ARG A	92	136.678	-9.622	3.082	1.00	0.00
ATOM 1343	CZ	ARG A	92	136.048	-10.481	2.285	1.00	0.00
ATOM 1344	NH1	ARG A	92	136.599	-11.654	1.994	1.00	0.00
ATOM 1345	NH2	ARG A	92	134.864	-10.169	1.777	1.00	0.00
ATOM 1346	H	ARG A	92	137.477	-6.195	5.139	1.00	0.00
ATOM 1347	HA	ARG A	92	136.406	-8.738	5.757	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.234	-7.696	5.999	1.00	0.00
ATOM 1349	2HB	ARG A	92	138.776	-9.388	6.138	1.00	0.00
ATOM 1350	1HG	ARG A	92	138.176	-7.758	3.690	1.00	0.00
ATOM 1351	2HG	ARG A	92	139.696	-8.627	3.906	1.00	0.00
ATOM 1352	1HD	ARG A	92	138.623	-10.346	2.952	1.00	0.00
ATOM 1353	2HD	ARG A	92	137.856	-10.545	4.527	1.00	0.00
ATOM 1354	HE	ARG A	92	136.248	-8.764	3.281	1.00	0.00

ATOM 1355	1HH1	ARG	A	92	137.492	-11.896	2.373	1.00	0.00
ATOM 1356	2HH1	ARG	A	92	136.120	-12.295	1.395	1.00	0.00
ATOM 1357	1HH2	ARG	A	92	134.444	-9.288	1.993	1.00	0.00
ATOM 1358	2HH2	ARG	A	92	134.390	-10.815	1.177	1.00	0.00
ATOM 1359	N	PHE	A	93	137.340	-6.872	8.258	1.00	0.00
ATOM 1360	CA	PHE	A	93	137.310	-6.734	9.709	1.00	0.00
ATOM 1361	C	PHE	A	93	136.350	-5.627	10.133	1.00	0.00
ATOM 1362	O	PHE	A	93	136.554	-4.973	11.155	1.00	0.00
ATOM 1363	CB	PHE	A	93	138.713	-6.439	10.243	1.00	0.00
ATOM 1364	CG	PHE	A	93	139.735	-7.465	9.842	1.00	0.00
ATOM 1365	CD1	PHE	A	93	140.148	-7.570	8.523	1.00	0.00
ATOM 1366	CD2	PHE	A	93	140.281	-8.323	10.782	1.00	0.00
ATOM 1367	CE1	PHE	A	93	141.090	-8.512	8.151	1.00	0.00
ATOM 1368	CE2	PHE	A	93	141.222	-9.267	10.416	1.00	0.00
ATOM 1369	CZ	PHE	A	93	141.626	-9.361	9.099	1.00	0.00
ATOM 1370	H	PHE	A	93	137.572	-6.093	7.709	1.00	0.00
ATOM 1371	HA	PHE	A	93	136.966	-7.671	10.124	1.00	0.00
ATOM 1372	1HB	PHE	A	93	139.039	-5.481	9.867	1.00	0.00
ATOM 1373	2HB	PHE	A	93	138.680	-6.406	11.321	1.00	0.00
ATOM 1374	HD1	PHE	A	93	139.731	-6.905	7.782	1.00	0.00
ATOM 1375	HD2	PHE	A	93	139.965	-8.250	11.813	1.00	0.00
ATOM 1376	HE1	PHE	A	93	141.403	-8.585	7.120	1.00	0.00
ATOM 1377	HE2	PHE	A	93	141.639	-9.930	11.159	1.00	0.00
ATOM 1378	HZ	PHE	A	93	142.361	-10.099	8.811	1.00	0.00
ATOM 1379	N	ALA	A	94	135.303	-5.421	9.339	1.00	0.00
ATOM 1380	CA	ALA	A	94	134.313	-4.393	9.632	1.00	0.00
ATOM 1381	C	ALA	A	94	133.083	-4.992	10.307	1.00	0.00
ATOM 1382	O	ALA	A	94	132.438	-5.889	9.763	1.00	0.00
ATOM 1383	CB	ALA	A	94	133.918	-3.663	8.357	1.00	0.00

ATOM 1384	H	ALA A	94	135.195	-5.975	8.537	1.00	0.00
ATOM 1385	HA	ALA A	94	134.765	-3.677	10.302	1.00	0.00
ATOM 1386	1HB	ALA A	94	134.109	-2.606	8.472	1.00	0.00
ATOM 1387	2HB	ALA A	94	132.867	-3.819	8.161	1.00	0.00
ATOM 1388	3HB	ALA A	94	134.498	-4.044	7.530	1.00	0.00
ATOM 1389	N	SER A	95	132.763	-4.490	11.495	1.00	0.00
ATOM 1390	CA	SER A	95	131.610	-4.975	12.245	1.00	0.00
ATOM 1391	C	SER A	95	130.308	-4.529	11.587	1.00	0.00
ATOM 1392	O	SER A	95	129.946	-3.354	11.637	1.00	0.00
ATOM 1393	CB	SER A	95	131.664	-4.470	13.688	1.00	0.00
ATOM 1394	OG	SER A	95	131.564	-3.058	13.739	1.00	0.00
ATOM 1395	H	SER A	95	133.315	-3.776	11.877	1.00	0.00
ATOM 1396	HA	SER A	95	131.648	-6.054	12.249	1.00	0.00
ATOM 1397	1HB	SER A	95	130.845	-4.897	14.247	1.00	0.00
ATOM 1398	2HB	SER A	95	132.600	-4.770	14.136	1.00	0.00
ATOM 1399	HG	SER A	95	132.373	-2.667	13.400	1.00	0.00
ATOM 1400	N	LEU A	96	129.608	-5.477	10.970	1.00	0.00
ATOM 1401	CA	LEU A	96	128.346	-5.182	10.302	1.00	0.00
ATOM 1402	C	LEU A	96	127.436	-6.404	10.293	1.00	0.00
ATOM 1403	O	LEU A	96	126.247	-6.309	10.601	1.00	0.00
ATOM 1404	CB	LEU A	96	128.601	-4.708	8.870	1.00	0.00
ATOM 1405	CG	LEU A	96	127.648	-3.623	8.366	1.00	0.00
ATOM 1406	CD1	LEU A	96	128.191	-2.242	8.694	1.00	0.00
ATOM 1407	CD2	LEU A	96	127.421	-3.768	6.869	1.00	0.00
ATOM 1408	H	LEU A	96	129.949	-6.395	10.965	1.00	0.00
ATOM 1409	HA	LEU A	96	127.859	-4.393	10.851	1.00	0.00
ATOM 1410	1HB	LEU A	96	129.611	-4.326	8.814	1.00	0.00
ATOM 1411	2HB	LEU A	96	128.520	-5.561	8.212	1.00	0.00
ATOM 1412	HG	LEU A	96	126.695	-3.733	8.862	1.00	0.00



ATOM 1413	1HD1	LEU A	96	129.269	-2.255	8.634	1.00	0.00
ATOM 1414	2HD1	LEU A	96	127.889	-1.963	9.694	1.00	0.00
ATOM 1415	3HD1	LEU A	96	127.801	-1.524	7.987	1.00	0.00
ATOM 1416	1HD2	LEU A	96	126.537	-4.363	6.695	1.00	0.00
ATOM 1417	2HD2	LEU A	96	128.275	-4.253	6.421	1.00	0.00
ATOM 1418	3HD2	LEU A	96	127.289	-2.790	6.429	1.00	0.00
ATOM 1419	N	GLN A	97	128.003	-7.548	9.937	1.00	0.00
ATOM 1420	CA	GLN A	97	127.247	-8.794	9.885	1.00	0.00
ATOM 1421	C	GLN A	97	126.955	-9.315	11.292	1.00	0.00
ATOM 1422	O	GLN A	97	125.796	-9.457	11.681	1.00	0.00
ATOM 1423	CB	GLN A	97	128.014	-9.848	9.081	1.00	0.00
ATOM 1424	CG	GLN A	97	127.274	-10.326	7.843	1.00	0.00
ATOM 1425	CD	GLN A	97	127.055	-9.219	6.831	1.00	0.00
ATOM 1426	OE1	GLN A	97	127.736	-8.193	6.859	1.00	0.00
ATOM 1427	NE2	GLN A	97	126.102	-9.421	5.929	1.00	0.00
ATOM 1428	H	GLN A	97	128.953	-7.555	9.703	1.00	0.00
ATOM 1429	HA	GLN A	97	126.309	-8.591	9.390	1.00	0.00
ATOM 1430	1HB	GLN A	97	128.959	-9.428	8.770	1.00	0.00
ATOM 1431	2HB	GLN A	97	128.202	-10.703	9.714	1.00	0.00
ATOM 1432	1HG	GLN A	97	127.849	-11.112	7.376	1.00	0.00
ATOM 1433	2HG	GLN A	97	126.311	-10.716	8.143	1.00	0.00
ATOM 1434	1HE2	GLN A	97	125.600	-10.262	5.967	1.00	0.00
ATOM 1435	2HE2	GLN A	97	125.939	-8.721	5.262	1.00	0.00
ATOM 1436	N	PRO A	98	128.007	-9.608	12.075	1.00	0.00
ATOM 1437	CA	PRO A	98	127.855	-10.116	13.442	1.00	0.00
ATOM 1438	C	PRO A	98	127.388	-9.036	14.412	1.00	0.00
ATOM 1439	O	PRO A	98	127.027	-7.933	14.001	1.00	0.00
ATOM 1440	CB	PRO A	98	129.266	-10.584	13.802	1.00	0.00
ATOM 1441	CG	PRO A	98	130.167	-9.736	12.973	1.00	0.00

ATOM 1442	CD	PRO A	98	129.426	-9.470	11.691	1.00	0.00
ATOM 1443	HA	PRO A	98	127.174	-10.952	13.480	1.00	0.00
ATOM 1444	1HB	PRO A	98	129.439	-10.434	14.858	1.00	0.00
ATOM 1445	2HB	PRO A	98	129.375	-11.630	13.558	1.00	0.00
ATOM 1446	1HG	PRO A	98	130.372	-8.809	13.488	1.00	0.00
ATOM 1447	2HG	PRO A	98	131.086	-10.266	12.772	1.00	0.00
ATOM 1448	1HD	PRO A	98	129.634	-8.470	11.337	1.00	0.00
ATOM 1449	2HD	PRO A	98	129.695	-10.199	10.941	1.00	0.00
ATOM 1450	N	SER A	99	127.397	-9.361	15.700	1.00	0.00
ATOM 1451	CA	SER A	99	126.974	-8.420	16.730	1.00	0.00
ATOM 1452	C	SER A	99	128.013	-8.325	17.842	1.00	0.00
ATOM 1453	O	SER A	99	127.894	-8.984	18.875	1.00	0.00
ATOM 1454	CB	SER A	99	125.624	-8.841	17.313	1.00	0.00
ATOM 1455	OG	SER A	99	125.449	-10.245	17.232	1.00	0.00
ATOM 1456	H	SER A	99	127.696	-10.257	15.965	1.00	0.00
ATOM 1457	HA	SER A	99	126.869	-7.449	16.269	1.00	0.00
ATOM 1458	1HB	SER A	99	125.573	-8.545	18.351	1.00	0.00
ATOM 1459	2HB	SER A	99	124.830	-8.359	16.762	1.00	0.00
ATOM 1460	HG	SER A	99	125.229	-10.489	16.329	1.00	0.00
ATOM 1461	N	GLY A	100	129.034	-7.502	17.623	1.00	0.00
ATOM 1462	CA	GLY A	100	130.080	-7.338	18.614	1.00	0.00
ATOM 1463	C	GLY A	100	129.626	-6.514	19.806	1.00	0.00
ATOM 1464	O	GLY A	100	128.689	-5.723	19.694	1.00	0.00
ATOM 1465	H	GLY A	100	129.076	-7.003	16.780	1.00	0.00
ATOM 1466	1HA	GLY A	100	130.389	-8.312	18.962	1.00	0.00
ATOM 1467	2HA	GLY A	100	130.925	-6.847	18.153	1.00	0.00
ATOM 1468	N	PRO A	101	130.277	-6.678	20.969	1.00	0.00
ATOM 1469	CA	PRO A	101	129.924	-5.935	22.183	1.00	0.00
ATOM 1470	C	PRO A	101	130.281	-4.456	22.081	1.00	0.00

ATOM 1471	O	PRO A 101	130.835	-4.008	21.078	1.00	0.00
ATOM 1472	CB	PRO A 101	130.760	-6.613	23.272	1.00	0.00
ATOM 1473	CG	PRO A 101	131.923	-7.196	22.548	1.00	0.00
ATOM 1474	CD	PRO A 101	131.408	-7.600	21.194	1.00	0.00
ATOM 1475	HA	PRO A 101	128.874	-6.036	22.418	1.00	0.00
ATOM 1476	1HB	PRO A 101	131.075	-5.877	23.998	1.00	0.00
ATOM 1477	2HB	PRO A 101	130.173	-7.379	23.757	1.00	0.00
ATOM 1478	1HG	PRO A 101	132.702	-6.456	22.446	1.00	0.00
ATOM 1479	2HG	PRO A 101	132.292	-8.060	23.080	1.00	0.00
ATOM 1480	1HD	PRO A 101	132.171	-7.462	20.442	1.00	0.00
ATOM 1481	2HD	PRO A 101	131.071	-8.625	21.207	1.00	0.00
ATOM 1482	N	SER A 102	129.959	-3.702	23.127	1.00	0.00
ATOM 1483	CA	SER A 102	130.245	-2.272	23.156	1.00	0.00
ATOM 1484	C	SER A 102	131.024	-1.897	24.413	1.00	0.00
ATOM 1485	O	SER A 102	132.035	-1.200	24.344	1.00	0.00
ATOM 1486	CB	SER A 102	128.945	-1.469	23.089	1.00	0.00
ATOM 1487	OG	SER A 102	127.980	-2.124	22.284	1.00	0.00
ATOM 1488	H	SER A 102	129.518	-4.116	23.899	1.00	0.00
ATOM 1489	HA	SER A 102	130.847	-2.037	22.291	1.00	0.00
ATOM 1490	1HB	SER A 102	128.544	-1.353	24.086	1.00	0.00
ATOM 1491	2HB	SER A 102	129.146	-0.495	22.668	1.00	0.00
ATOM 1492	HG	SER A 102	128.380	-2.382	21.450	1.00	0.00
ATOM 1493	N	SER A 103	130.545	-2.367	25.561	1.00	0.00
ATOM 1494	CA	SER A 103	131.197	-2.082	26.834	1.00	0.00
ATOM 1495	C	SER A 103	130.874	-3.160	27.863	1.00	0.00
ATOM 1496	O	SER A 103	131.771	-3.823	28.384	1.00	0.00
ATOM 1497	CB	SER A 103	130.760	-0.712	27.358	1.00	0.00
ATOM 1498	OG	SER A 103	131.620	0.311	26.891	1.00	0.00
ATOM 1499	H	SER A 103	129.734	-2.918	25.551	1.00	0.00

ATOM 1500	HA	SER A 103	132.262	-2.069	26.665	1.00	0.00
ATOM 1501	1HB	SER A 103	129.756	-0.503	27.021	1.00	0.00
ATOM 1502	2HB	SER A 103	130.783	-0.720	28.438	1.00	0.00
ATOM 1503	HG	SER A 103	132.396	0.360	27.455	1.00	0.00
ATOM 1504	N	GLY A 104	129.588	-3.329	28.153	1.00	0.00
ATOM 1505	CA	GLY A 104	129.170	-4.328	29.119	1.00	0.00
ATOM 1506	C	GLY A 104	127.832	-4.001	29.751	1.00	0.00
ATOM 1507	O	GLY A 104	127.823	-3.345	30.815	1.00	0.00
ATOM 1508	OXT	GLY A 104	126.794	-4.397	29.183	1.00	0.00
ATOM 1509	H	GLY A 104	128.917	-2.771	27.707	1.00	0.00
ATOM 1510	1HA	GLY A 104	129.097	-5.284	28.622	1.00	0.00
ATOM 1511	2HA	GLY A 104	129.917	-4.395	29.897	1.00	0.00
TER 1512		GLY A 104					
ENDMDL							

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## 立体構造座標表 8

ATOM 1	N	GLY A	1	135.862	21.326	-5.428	1.00	0.00
ATOM 2	CA	GLY A	1	136.784	22.453	-5.740	1.00	0.00
ATOM 3	C	GLY A	1	136.436	23.144	-7.044	1.00	0.00
ATOM 4	O	GLY A	1	135.778	24.184	-7.046	1.00	0.00
ATOM 5	1H	GLY A	1	134.965	21.447	-5.941	1.00	0.00
ATOM 6	2H	GLY A	1	135.664	21.298	-4.408	1.00	0.00
ATOM 7	3H	GLY A	1	136.294	20.423	-5.712	1.00	0.00
ATOM 8	1HA	GLY A	1	136.736	23.175	-4.938	1.00	0.00
ATOM 9	2HA	GLY A	1	137.793	22.071	-5.805	1.00	0.00
ATOM 10	N	SER A	2	136.880	22.565	-8.154	1.00	0.00
ATOM 11	CA	SER A	2	136.611	23.132	-9.471	1.00	0.00
ATOM 12	C	SER A	2	135.133	23.008	-9.825	1.00	0.00

ATOM 13	O	SER A	2	134.622	21.906	-10.024	1.00	0.00
ATOM 14	CB	SER A	2	137.463	22.432	-10.532	1.00	0.00
ATOM 15	OG	SER A	2	137.904	23.351	-11.518	1.00	0.00
ATOM 16	H	SER A	2	137.399	21.736	-8.087	1.00	0.00
ATOM 17	HA	SER A	2	136.876	24.178	-9.441	1.00	0.00
ATOM 18	1HB	SER A	2	138.326	21.986	-10.063	1.00	0.00
ATOM 19	2HB	SER A	2	136.876	21.663	-11.012	1.00	0.00
ATOM 20	HG	SER A	2	138.856	23.456	-11.454	1.00	0.00
ATOM 21	N	SER A	3	134.452	24.146	-9.904	1.00	0.00
ATOM 22	CA	SER A	3	133.032	24.166	-10.234	1.00	0.00
ATOM 23	C	SER A	3	132.822	24.039	-11.740	1.00	0.00
ATOM 24	O	SER A	3	133.076	24.979	-12.494	1.00	0.00
ATOM 25	CB	SER A	3	132.385	25.455	-9.725	1.00	0.00
ATOM 26	OG	SER A	3	132.929	26.590	-10.375	1.00	0.00
ATOM 27	H	SER A	3	134.915	24.993	-9.735	1.00	0.00
ATOM 28	HA	SER A	3	132.567	23.323	-9.747	1.00	0.00
ATOM 29	1HB	SER A	3	131.323	25.422	-9.915	1.00	0.00
ATOM 30	2HB	SER A	3	132.558	25.547	-8.663	1.00	0.00
ATOM 31	HG	SER A	3	132.626	26.615	-11.286	1.00	0.00
ATOM 32	N	GLY A	4	132.358	22.871	-12.172	1.00	0.00
ATOM 33	CA	GLY A	4	132.122	22.643	-13.585	1.00	0.00
ATOM 34	C	GLY A	4	132.095	21.169	-13.938	1.00	0.00
ATOM 35	O	GLY A	4	132.285	20.314	-13.073	1.00	0.00
ATOM 36	H	GLY A	4	132.174	22.159	-11.525	1.00	0.00
ATOM 37	1HA	GLY A	4	131.175	23.084	-13.857	1.00	0.00
ATOM 38	2HA	GLY A	4	132.906	23.123	-14.151	1.00	0.00
ATOM 39	N	SER A	5	131.857	20.871	-15.211	1.00	0.00
ATOM 40	CA	SER A	5	131.806	19.490	-15.676	1.00	0.00
ATOM 41	C	SER A	5	130.700	18.717	-14.963	1.00	0.00

ATOM 42	O	SER A	5	130.136	19.190	-13.977	1.00	0.00
ATOM 43	CB	SER A	5	133.153	18.803	-15.448	1.00	0.00
ATOM 44	OG	SER A	5	133.460	17.916	-16.510	1.00	0.00
ATOM 45	H	SER A	5	131.714	21.598	-15.853	1.00	0.00
ATOM 46	HA	SER A	5	131.593	19.505	-16.734	1.00	0.00
ATOM 47	1HB	SER A	5	133.930	19.550	-15.385	1.00	0.00
ATOM 48	2HB	SER A	5	133.118	18.242	-14.526	1.00	0.00
ATOM 49	HG	SER A	5	133.809	18.414	-17.252	1.00	0.00
ATOM 50	N	SER A	6	130.397	17.527	-15.469	1.00	0.00
ATOM 51	CA	SER A	6	129.360	16.689	-14.880	1.00	0.00
ATOM 52	C	SER A	6	129.754	15.216	-14.934	1.00	0.00
ATOM 53	O	SER A	6	129.519	14.536	-15.934	1.00	0.00
ATOM 54	CB	SER A	6	128.031	16.900	-15.608	1.00	0.00
ATOM 55	OG	SER A	6	128.003	18.156	-16.264	1.00	0.00
ATOM 56	H	SER A	6	130.884	17.203	-16.256	1.00	0.00
ATOM 57	HA	SER A	6	129.244	16.980	-13.847	1.00	0.00
ATOM 58	1HB	SER A	6	127.897	16.121	-16.343	1.00	0.00
ATOM 59	2HB	SER A	6	127.222	16.863	-14.893	1.00	0.00
ATOM 60	HG	SER A	6	127.925	18.856	-15.612	1.00	0.00
ATOM 61	N	GLY A	7	130.352	14.729	-13.853	1.00	0.00
ATOM 62	CA	GLY A	7	130.769	13.340	-13.798	1.00	0.00
ATOM 63	C	GLY A	7	131.372	12.967	-12.458	1.00	0.00
ATOM 64	O	GLY A	7	132.589	12.825	-12.335	1.00	0.00
ATOM 65	H	GLY A	7	130.513	15.317	-13.085	1.00	0.00
ATOM 66	1HA	GLY A	7	129.910	12.711	-13.981	1.00	0.00
ATOM 67	2HA	GLY A	7	131.502	13.165	-14.571	1.00	0.00
ATOM 68	N	LEU A	8	130.520	12.809	-11.450	1.00	0.00
ATOM 69	CA	LEU A	8	130.974	12.451	-10.112	1.00	0.00
ATOM 70	C	LEU A	8	130.399	11.105	-9.684	1.00	0.00

ATOM 71	O	LEU A	8	129.312	10.718	-10.114	1.00	0.00
ATOM 72	CB	LEU A	8	130.573	13.532	-9.107	1.00	0.00
ATOM 73	CG	LEU A	8	130.735	14.970	-9.605	1.00	0.00
ATOM 74	CD1	LEU A	8	129.892	15.921	-8.770	1.00	0.00
ATOM 75	CD2	LEU A	8	132.199	15.382	-9.570	1.00	0.00
ATOM 76	H	LEU A	8	129.561	12.936	-11.611	1.00	0.00
ATOM 77	HA	LEU A	8	132.051	12.376	-10.136	1.00	0.00
ATOM 78	1HB	LEU A	8	129.538	13.379	-8.841	1.00	0.00
ATOM 79	2HB	LEU A	8	131.177	13.412	-8.221	1.00	0.00
ATOM 80	HG	LEU A	8	130.392	15.031	-10.627	1.00	0.00
ATOM 81	1HD1	LEU A	8	129.871	16.892	-9.242	1.00	0.00
ATOM 82	2HD1	LEU A	8	130.321	16.010	-7.782	1.00	0.00
ATOM 83	3HD1	LEU A	8	128.885	15.537	-8.692	1.00	0.00
ATOM 84	1HD2	LEU A	8	132.656	15.168	-10.525	1.00	0.00
ATOM 85	2HD2	LEU A	8	132.710	14.832	-8.795	1.00	0.00
ATOM 86	3HD2	LEU A	8	132.270	16.441	-9.367	1.00	0.00
ATOM 87	N	ALA A	9	131.134	10.395	-8.834	1.00	0.00
ATOM 88	CA	ALA A	9	130.696	9.092	-8.348	1.00	0.00
ATOM 89	C	ALA A	9	131.453	8.694	-7.086	1.00	0.00
ATOM 90	O	ALA A	9	131.772	7.522	-6.886	1.00	0.00
ATOM 91	CB	ALA A	9	130.878	8.038	-9.430	1.00	0.00
ATOM 92	H	ALA A	9	131.991	10.756	-8.527	1.00	0.00
ATOM 93	HA	ALA A	9	129.643	9.160	-8.118	1.00	0.00
ATOM 94	1HB	ALA A	9	129.990	7.996	-10.045	1.00	0.00
ATOM 95	2HB	ALA A	9	131.042	7.075	-8.970	1.00	0.00
ATOM 96	3HB	ALA A	9	131.728	8.295	-10.044	1.00	0.00
ATOM 97	N	MET A	10	131.737	9.675	-6.238	1.00	0.00
ATOM 98	CA	MET A	10	132.457	9.427	-4.994	1.00	0.00
ATOM 99	C	MET A	10	132.314	10.608	-4.035	1.00	0.00

ATOM 100	O	MET A	10	133.291	11.291	-3.728	1.00	0.00
ATOM 101	CB	MET A	10	133.936	9.159	-5.280	1.00	0.00
ATOM 102	CG	MET A	10	134.602	10.248	-6.106	1.00	0.00
ATOM 103	SD	MET A	10	136.400	10.200	-5.997	1.00	0.00
ATOM 104	CE	MET A	10	136.829	11.766	-6.751	1.00	0.00
ATOM 105	H	MET A	10	131.456	10.589	-6.452	1.00	0.00
ATOM 106	HA	MET A	10	132.025	8.550	-4.532	1.00	0.00
ATOM 107	1HB	MET A	10	134.463	9.076	-4.342	1.00	0.00
ATOM 108	2HB	MET A	10	134.023	8.226	-5.817	1.00	0.00
ATOM 109	1HG	MET A	10	134.315	10.123	-7.140	1.00	0.00
ATOM 110	2HG	MET A	10	134.259	11.209	-5.752	1.00	0.00
ATOM 111	1HE	MET A	10	137.179	11.598	-7.758	1.00	0.00
ATOM 112	2HE	MET A	10	137.606	12.244	-6.174	1.00	0.00
ATOM 113	3HE	MET A	10	135.957	12.404	-6.776	1.00	0.00
ATOM 114	N	PRO A	11	131.087	10.866	-3.550	1.00	0.00
ATOM 115	CA	PRO A	11	130.821	11.971	-2.624	1.00	0.00
ATOM 116	C	PRO A	11	131.642	11.867	-1.340	1.00	0.00
ATOM 117	O	PRO A	11	132.251	12.845	-0.908	1.00	0.00
ATOM 118	CB	PRO A	11	129.326	11.848	-2.315	1.00	0.00
ATOM 119	CG	PRO A	11	128.762	11.010	-3.412	1.00	0.00
ATOM 120	CD	PRO A	11	129.869	10.103	-3.867	1.00	0.00
ATOM 121	HA	PRO A	11	131.015	12.926	-3.092	1.00	0.00
ATOM 122	1HB	PRO A	11	129.192	11.379	-1.351	1.00	0.00
ATOM 123	2HB	PRO A	11	128.878	12.831	-2.304	1.00	0.00
ATOM 124	1HG	PRO A	11	127.936	10.427	-3.036	1.00	0.00
ATOM 125	2HG	PRO A	11	128.436	11.641	-4.225	1.00	0.00
ATOM 126	1HD	PRO A	11	129.843	9.171	-3.321	1.00	0.00
ATOM 127	2HD	PRO A	11	129.794	9.920	-4.929	1.00	0.00
ATOM 128	N	PRO A	12	131.677	10.677	-0.709	1.00	0.00



ATOM 129	CA	PRO A	12	132.438	10.469	0.528	1.00	0.00
ATOM 130	C	PRO A	12	133.904	10.857	0.370	1.00	0.00
ATOM 131	O	PRO A	12	134.589	11.145	1.352	1.00	0.00
ATOM 132	CB	PRO A	12	132.309	8.965	0.784	1.00	0.00
ATOM 133	CG	PRO A	12	131.074	8.556	0.061	1.00	0.00
ATOM 134	CD	PRO A	12	130.989	9.447	-1.146	1.00	0.00
ATOM 135	HA	PRO A	12	132.008	11.017	1.353	1.00	0.00
ATOM 136	1HB	PRO A	12	133.180	8.455	0.397	1.00	0.00
ATOM 137	2HB	PRO A	12	132.223	8.783	1.845	1.00	0.00
ATOM 138	1HG	PRO A	12	131.149	7.522	-0.240	1.00	0.00
ATOM 139	2HG	PRO A	12	130.212	8.703	0.695	1.00	0.00
ATOM 140	1HD	PRO A	12	131.501	8.996	-1.984	1.00	0.00
ATOM 141	2HD	PRO A	12	129.959	9.647	-1.395	1.00	0.00
ATOM 142	N	GLY A	13	134.378	10.862	-0.872	1.00	0.00
ATOM 143	CA	GLY A	13	135.761	11.216	-1.136	1.00	0.00
ATOM 144	C	GLY A	13	136.420	10.278	-2.127	1.00	0.00
ATOM 145	O	GLY A	13	136.953	10.716	-3.146	1.00	0.00
ATOM 146	H	GLY A	13	133.785	10.624	-1.616	1.00	0.00
ATOM 147	1HA	GLY A	13	135.794	12.220	-1.531	1.00	0.00
ATOM 148	2HA	GLY A	13	136.311	11.187	-0.208	1.00	0.00
ATOM 149	N	ASN A	14	136.385	8.983	-1.827	1.00	0.00
ATOM 150	CA	ASN A	14	136.984	7.980	-2.698	1.00	0.00
ATOM 151	C	ASN A	14	136.171	6.690	-2.683	1.00	0.00
ATOM 152	O	ASN A	14	136.322	5.861	-1.785	1.00	0.00
ATOM 153	CB	ASN A	14	138.424	7.694	-2.268	1.00	0.00
ATOM 154	CG	ASN A	14	139.315	8.916	-2.382	1.00	0.00
ATOM 155	OD1	ASN A	14	140.077	9.056	-3.338	1.00	0.00
ATOM 156	ND2	ASN A	14	139.222	9.809	-1.403	1.00	0.00
ATOM 157	H	ASN A	14	135.946	8.697	-0.999	1.00	0.00

ATOM 158	HA	ASN A	14	136.990	8.375	-3.704	1.00	0.00
ATOM 159	1HB	ASN A	14	138.428	7.364	-1.240	1.00	0.00
ATOM 160	2HB	ASN A	14	138.832	6.914	-2.894	1.00	0.00
ATOM 161	1HD2	ASN A	14	138.593	9.631	-0.673	1.00	0.00
ATOM 162	2HD2	ASN A	14	139.787	10.609	-1.451	1.00	0.00
ATOM 163	N	SER A	15	135.310	6.527	-3.682	1.00	0.00
ATOM 164	CA	SER A	15	134.470	5.338	-3.787	1.00	0.00
ATOM 165	C	SER A	15	133.494	5.253	-2.616	1.00	0.00
ATOM 166	O	SER A	15	132.317	5.585	-2.753	1.00	0.00
ATOM 167	CB	SER A	15	135.336	4.076	-3.840	1.00	0.00
ATOM 168	OG	SER A	15	135.576	3.678	-5.179	1.00	0.00
ATOM 169	H	SER A	15	135.237	7.224	-4.368	1.00	0.00
ATOM 170	HA	SER A	15	133.905	5.413	-4.704	1.00	0.00
ATOM 171	1HB	SER A	15	136.284	4.272	-3.361	1.00	0.00
ATOM 172	2HB	SER A	15	134.832	3.273	-3.323	1.00	0.00
ATOM 173	HG	SER A	15	136.355	4.129	-5.512	1.00	0.00
ATOM 174	N	HIS A	16	133.990	4.808	-1.466	1.00	0.00
ATOM 175	CA	HIS A	16	133.161	4.680	-0.273	1.00	0.00
ATOM 176	C	HIS A	16	133.758	5.463	0.892	1.00	0.00
ATOM 177	O	HIS A	16	133.046	6.158	1.616	1.00	0.00
ATOM 178	CB	HIS A	16	133.007	3.208	0.111	1.00	0.00
ATOM 179	CG	HIS A	16	131.982	2.480	-0.703	1.00	0.00
ATOM 180	ND1	HIS A	16	130.635	2.772	-0.652	1.00	0.00
ATOM 181	CD2	HIS A	16	132.113	1.469	-1.593	1.00	0.00
ATOM 182	CE1	HIS A	16	129.982	1.969	-1.475	1.00	0.00
ATOM 183	NE2	HIS A	16	130.856	1.170	-2.059	1.00	0.00
ATOM 184	H	HIS A	16	134.936	4.559	-1.419	1.00	0.00
ATOM 185	HA	HIS A	16	132.187	5.087	-0.502	1.00	0.00
ATOM 186	1HB	HIS A	16	133.953	2.708	-0.024	1.00	0.00

ATOM 187	2HB	HIS A	16	132.715	3.143	1.149	1.00	0.00
ATOM 188	HD1	HIS A	16	130.219	3.462	-0.095	1.00	0.00
ATOM 189	HD2	HIS A	16	133.035	0.986	-1.884	1.00	0.00
ATOM 190	HE1	HIS A	16	128.915	1.969	-1.642	1.00	0.00
ATOM 191	HE2	HIS A	16	130.650	0.540	-2.779	1.00	0.00
ATOM 192	N	GLY A	17	135.070	5.345	1.066	1.00	0.00
ATOM 193	CA	GLY A	17	135.741	6.047	2.144	1.00	0.00
ATOM 194	C	GLY A	17	137.087	5.436	2.485	1.00	0.00
ATOM 195	O	GLY A	17	137.242	4.806	3.530	1.00	0.00
ATOM 196	H	GLY A	17	135.587	4.777	0.457	1.00	0.00
ATOM 197	1HA	GLY A	17	135.889	7.076	1.853	1.00	0.00
ATOM 198	2HA	GLY A	17	135.113	6.019	3.022	1.00	0.00
ATOM 199	N	LEU A	18	138.060	5.623	1.600	1.00	0.00
ATOM 200	CA	LEU A	18	139.399	5.086	1.811	1.00	0.00
ATOM 201	C	LEU A	18	140.344	6.167	2.328	1.00	0.00
ATOM 202	O	LEU A	18	140.685	7.103	1.606	1.00	0.00
ATOM 203	CB	LEU A	18	139.946	4.493	0.511	1.00	0.00
ATOM 204	CG	LEU A	18	139.060	3.428	-0.138	1.00	0.00
ATOM 205	CD1	LEU A	18	139.482	3.188	-1.579	1.00	0.00
ATOM 206	CD2	LEU A	18	139.115	2.134	0.659	1.00	0.00
ATOM 207	H	LEU A	18	137.874	6.134	0.784	1.00	0.00
ATOM 208	HA	LEU A	18	139.328	4.303	2.551	1.00	0.00
ATOM 209	1HB	LEU A	18	140.082	5.298	-0.196	1.00	0.00
ATOM 210	2HB	LEU A	18	140.908	4.051	0.718	1.00	0.00
ATOM 211	HG	LEU A	18	138.037	3.776	-0.144	1.00	0.00
ATOM 212	1HD1	LEU A	18	139.230	2.178	-1.864	1.00	0.00
ATOM 213	2HD1	LEU A	18	140.549	3.332	-1.670	1.00	0.00
ATOM 214	3HD1	LEU A	18	138.969	3.883	-2.226	1.00	0.00
ATOM 215	1HD2	LEU A	18	140.134	1.935	0.954	1.00	0.00

ATOM 216	2HD2	LEU A	18	138.751	1.320	0.050	1.00	0.00
ATOM 217	3HD2	LEU A	18	138.497	2.226	1.540	1.00	0.00
ATOM 218	N	GLU A	19	140.763	6.029	3.581	1.00	0.00
ATOM 219	CA	GLU A	19	141.670	6.993	4.194	1.00	0.00
ATOM 220	C	GLU A	19	142.671	6.294	5.108	1.00	0.00
ATOM 221	O	GLU A	19	142.581	5.089	5.338	1.00	0.00
ATOM 222	CB	GLU A	19	140.878	8.036	4.986	1.00	0.00
ATOM 223	CG	GLU A	19	139.943	7.432	6.022	1.00	0.00
ATOM 224	CD	GLU A	19	138.972	8.446	6.592	1.00	0.00
ATOM 225	OE1	GLU A	19	138.749	8.429	7.820	1.00	0.00
ATOM 226	OE2	GLU A	19	138.435	9.259	5.810	1.00	0.00
ATOM 227	H	GLU A	19	140.458	5.260	4.107	1.00	0.00
ATOM 228	HA	GLU A	19	142.209	7.491	3.402	1.00	0.00
ATOM 229	1HB	GLU A	19	141.573	8.686	5.497	1.00	0.00
ATOM 230	2HB	GLU A	19	140.288	8.623	4.298	1.00	0.00
ATOM 231	1HG	GLU A	19	139.378	6.637	5.558	1.00	0.00
ATOM 232	2HG	GLU A	19	140.535	7.027	6.830	1.00	0.00
ATOM 233	N	VAL A	20	143.626	7.060	5.626	1.00	0.00
ATOM 234	CA	VAL A	20	144.644	6.514	6.516	1.00	0.00
ATOM 235	C	VAL A	20	144.014	5.893	7.757	1.00	0.00
ATOM 236	O	VAL A	20	143.157	6.499	8.401	1.00	0.00
ATOM 237	CB	VAL A	20	145.649	7.598	6.952	1.00	0.00
ATOM 238	CG1	VAL A	20	146.811	6.976	7.710	1.00	0.00
ATOM 239	CG2	VAL A	20	146.147	8.381	5.747	1.00	0.00
ATOM 240	H	VAL A	20	143.645	8.015	5.406	1.00	0.00
ATOM 241	HA	VAL A	20	145.184	5.750	5.976	1.00	0.00
ATOM 242	HB	VAL A	20	145.142	8.284	7.615	1.00	0.00
ATOM 243	1HG1	VAL A	20	147.087	6.042	7.244	1.00	0.00
ATOM 244	2HG1	VAL A	20	146.517	6.793	8.733	1.00	0.00

ATOM 245	3HG1	VAL A	20	147.655	7.650	7.693	1.00	0.00
ATOM 246	1HG2	VAL A	20	147.116	8.803	5.967	1.00	0.00
ATOM 247	2HG2	VAL A	20	145.451	9.175	5.521	1.00	0.00
ATOM 248	3HG2	VAL A	20	146.227	7.720	4.897	1.00	0.00
ATOM 249	N	GLY A	21	144.445	4.680	8.089	1.00	0.00
ATOM 250	CA	GLY A	21	143.912	3.996	9.253	1.00	0.00
ATOM 251	C	GLY A	21	142.916	2.914	8.885	1.00	0.00
ATOM 252	O	GLY A	21	142.848	1.876	9.542	1.00	0.00
ATOM 253	H	GLY A	21	145.130	4.247	7.539	1.00	0.00
ATOM 254	1HA	GLY A	21	144.730	3.548	9.799	1.00	0.00
ATOM 255	2HA	GLY A	21	143.424	4.720	9.888	1.00	0.00
ATOM 256	N	SER A	22	142.142	3.158	7.834	1.00	0.00
ATOM 257	CA	SER A	22	141.145	2.196	7.379	1.00	0.00
ATOM 258	C	SER A	22	141.791	1.093	6.546	1.00	0.00
ATOM 259	O	SER A	22	142.817	1.309	5.902	1.00	0.00
ATOM 260	CB	SER A	22	140.061	2.901	6.561	1.00	0.00
ATOM 261	OG	SER A	22	139.134	3.563	7.404	1.00	0.00
ATOM 262	H	SER A	22	142.245	4.005	7.350	1.00	0.00
ATOM 263	HA	SER A	22	140.691	1.752	8.253	1.00	0.00
ATOM 264	1HB	SER A	22	140.522	3.631	5.911	1.00	0.00
ATOM 265	2HB	SER A	22	139.532	2.172	5.965	1.00	0.00
ATOM 266	HG	SER A	22	139.608	4.049	8.083	1.00	0.00
ATOM 267	N	LEU A	23	141.182	-0.088	6.563	1.00	0.00
ATOM 268	CA	LEU A	23	141.698	-1.224	5.809	1.00	0.00
ATOM 269	C	LEU A	23	141.307	-1.125	4.338	1.00	0.00
ATOM 270	O	LEU A	23	140.274	-0.549	3.998	1.00	0.00
ATOM 271	CB	LEU A	23	141.177	-2.535	6.399	1.00	0.00
ATOM 272	CG	LEU A	23	141.354	-2.680	7.911	1.00	0.00
ATOM 273	CD1	LEU A	23	140.277	-3.584	8.491	1.00	0.00

ATOM 274	CD2	LEU A	23	142.738	-3.221	8.235	1.00	0.00
ATOM 275	H	LEU A	23	140.367	-0.198	7.095	1.00	0.00
ATOM 276	HA	LEU A	23	142.775	-1.210	5.884	1.00	0.00
ATOM 277	1HB	LEU A	23	140.123	-2.612	6.172	1.00	0.00
ATOM 278	2HB	LEU A	23	141.693	-3.352	5.919	1.00	0.00
ATOM 279	HG	LEU A	23	141.257	-1.708	8.373	1.00	0.00
ATOM 280	1HD1	LEU A	23	140.028	-3.253	9.489	1.00	0.00
ATOM 281	2HD1	LEU A	23	140.642	-4.600	8.529	1.00	0.00
ATOM 282	3HD1	LEU A	23	139.396	-3.540	7.868	1.00	0.00
ATOM 283	1HD2	LEU A	23	143.421	-2.963	7.439	1.00	0.00
ATOM 284	2HD2	LEU A	23	142.691	-4.296	8.333	1.00	0.00
ATOM 285	3HD2	LEU A	23	143.085	-2.791	9.162	1.00	0.00
ATOM 286	N	ALA A	24	142.140	-1.689	3.470	1.00	0.00
ATOM 287	CA	ALA A	24	141.882	-1.663	2.035	1.00	0.00
ATOM 288	C	ALA A	24	142.477	-2.887	1.349	1.00	0.00
ATOM 289	O	ALA A	24	143.416	-3.502	1.856	1.00	0.00
ATOM 290	CB	ALA A	24	142.439	-0.388	1.421	1.00	0.00
ATOM 291	H	ALA A	24	142.948	-2.133	3.802	1.00	0.00
ATOM 292	HA	ALA A	24	140.811	-1.667	1.890	1.00	0.00
ATOM 293	1HB	ALA A	24	143.407	-0.591	0.986	1.00	0.00
ATOM 294	2HB	ALA A	24	142.541	0.365	2.188	1.00	0.00
ATOM 295	3HB	ALA A	24	141.767	-0.034	0.654	1.00	0.00
ATOM 296	N	GLU A	25	141.926	-3.237	0.191	1.00	0.00
ATOM 297	CA	GLU A	25	142.403	-4.388	-0.566	1.00	0.00
ATOM 298	C	GLU A	25	142.632	-4.020	-2.029	1.00	0.00
ATOM 299	O	GLU A	25	141.891	-3.223	-2.602	1.00	0.00
ATOM 300	CB	GLU A	25	141.401	-5.540	-0.470	1.00	0.00
ATOM 301	CG	GLU A	25	142.005	-6.899	-0.780	1.00	0.00
ATOM 302	CD	GLU A	25	141.078	-7.776	-1.599	1.00	0.00

ATOM 303	OE1	GLU A	25	141.583	-8.664	-2.319	1.00	0.00
ATOM 304	OE2	GLU A	25	139.847	-7.577	-1.520	1.00	0.00
ATOM 305	H	GLU A	25	141.181	-2.708	-0.163	1.00	0.00
ATOM 306	HA	GLU A	25	143.341	-4.703	-0.135	1.00	0.00
ATOM 307	1HB	GLU A	25	140.998	-5.569	0.532	1.00	0.00
ATOM 308	2HB	GLU A	25	140.596	-5.360	-1.167	1.00	0.00
ATOM 309	1HG	GLU A	25	142.920	-6.755	-1.332	1.00	0.00
ATOM 310	2HG	GLU A	25	142.223	-7.402	0.152	1.00	0.00
ATOM 311	N	VAL A	26	143.664	-4.607	-2.627	1.00	0.00
ATOM 312	CA	VAL A	26	143.992	-4.340	-4.022	1.00	0.00
ATOM 313	C	VAL A	26	143.563	-5.497	-4.918	1.00	0.00
ATOM 314	O	VAL A	26	143.381	-6.622	-4.450	1.00	0.00
ATOM 315	CB	VAL A	26	145.500	-4.093	-4.208	1.00	0.00
ATOM 316	CG1	VAL A	26	145.793	-3.607	-5.619	1.00	0.00
ATOM 317	CG2	VAL A	26	146.010	-3.097	-3.177	1.00	0.00
ATOM 318	H	VAL A	26	144.220	-5.233	-2.117	1.00	0.00
ATOM 319	HA	VAL A	26	143.462	-3.448	-4.325	1.00	0.00
ATOM 320	HB	VAL A	26	146.019	-5.029	-4.060	1.00	0.00
ATOM 321	1HG1	VAL A	26	145.913	-4.456	-6.276	1.00	0.00
ATOM 322	2HG1	VAL A	26	146.700	-3.022	-5.618	1.00	0.00
ATOM 323	3HG1	VAL A	26	144.972	-2.997	-5.968	1.00	0.00
ATOM 324	1HG2	VAL A	26	146.053	-3.572	-2.209	1.00	0.00
ATOM 325	2HG2	VAL A	26	145.341	-2.250	-3.133	1.00	0.00
ATOM 326	3HG2	VAL A	26	146.998	-2.762	-3.457	1.00	0.00
ATOM 327	N	LYS A	27	143.402	-5.215	-6.206	1.00	0.00
ATOM 328	CA	LYS A	27	142.994	-6.233	-7.167	1.00	0.00
ATOM 329	C	LYS A	27	144.201	-6.795	-7.911	1.00	0.00
ATOM 330	O	LYS A	27	144.125	-7.090	-9.103	1.00	0.00
ATOM 331	CB	LYS A	27	141.991	-5.650	-8.164	1.00	0.00

ATOM 332	CG	LYS A	27	142.567	-4.539	-9.028	1.00	0.00
ATOM 333	CD	LYS A	27	141.949	-4.536	-10.418	1.00	0.00
ATOM 334	CE	LYS A	27	142.791	-5.328	-11.406	1.00	0.00
ATOM 335	NZ	LYS A	27	141.989	-6.363	-12.115	1.00	0.00
ATOM 336	H	LYS A	27	143.561	-4.300	-6.518	1.00	0.00
ATOM 337	HA	LYS A	27	142.519	-7.033	-6.620	1.00	0.00
ATOM 338	1HB	LYS A	27	141.647	-6.440	-8.815	1.00	0.00
ATOM 339	2HB	LYS A	27	141.149	-5.252	-7.619	1.00	0.00
ATOM 340	1HG	LYS A	27	142.369	-3.589	-8.556	1.00	0.00
ATOM 341	2HG	LYS A	27	143.634	-4.683	-9.117	1.00	0.00
ATOM 342	1HD	LYS A	27	140.966	-4.979	-10.364	1.00	0.00
ATOM 343	2HD	LYS A	27	141.868	-3.516	-10.762	1.00	0.00
ATOM 344	1HE	LYS A	27	143.204	-4.646	-12.134	1.00	0.00
ATOM 345	2HE	LYS A	27	143.595	-5.812	-10.871	1.00	0.00
ATOM 346	1HZ	LYS A	27	142.045	-7.269	-11.606	1.00	0.00
ATOM 347	2HZ	LYS A	27	142.351	-6.497	-13.081	1.00	0.00
ATOM 348	3HZ	LYS A	27	140.993	-6.068	-12.168	1.00	0.00
ATOM 349	N	GLU A	28	145.314	-6.940	-7.199	1.00	0.00
ATOM 350	CA	GLU A	28	146.537	-7.467	-7.793	1.00	0.00
ATOM 351	C	GLU A	28	146.479	-8.988	-7.899	1.00	0.00
ATOM 352	O	GLU A	28	145.509	-9.614	-7.472	1.00	0.00
ATOM 353	CB	GLU A	28	147.753	-7.046	-6.964	1.00	0.00
ATOM 354	CG	GLU A	28	148.886	-6.467	-7.797	1.00	0.00
ATOM 355	CD	GLU A	28	150.212	-6.475	-7.064	1.00	0.00
ATOM 356	OE1	GLU A	28	150.759	-5.379	-6.815	1.00	0.00
ATOM 357	OE2	GLU A	28	150.704	-7.575	-6.738	1.00	0.00
ATOM 358	H	GLU A	28	145.312	-6.687	-6.252	1.00	0.00
ATOM 359	HA	GLU A	28	146.628	-7.052	-8.786	1.00	0.00
ATOM 360	1HB	GLU A	28	147.445	-6.299	-6.248	1.00	0.00



ATOM 361	2HB	GLU A	28	148.131	-7.908	-6.433	1.00	0.00
ATOM 362	1HG	GLU A	28	148.987	-7.052	-8.699	1.00	0.00
ATOM 363	2HG	GLU A	28	148.639	-5.448	-8.058	1.00	0.00
ATOM 364	N	ASN A	29	147.525	-9.576	-8.471	1.00	0.00
ATOM 365	CA	ASN A	29	147.594	-11.024	-8.632	1.00	0.00
ATOM 366	C	ASN A	29	147.522	-11.726	-7.277	1.00	0.00
ATOM 367	O	ASN A	29	146.628	-12.537	-7.037	1.00	0.00
ATOM 368	CB	ASN A	29	148.882	-11.416	-9.358	1.00	0.00
ATOM 369	CG	ASN A	29	148.671	-11.604	-10.847	1.00	0.00
ATOM 370	OD1	ASN A	29	148.987	-12.657	-11.403	1.00	0.00
ATOM 371	ND2	ASN A	29	148.135	-10.581	-11.504	1.00	0.00
ATOM 372	H	ASN A	29	148.269	-9.024	-8.791	1.00	0.00
ATOM 373	HA	ASN A	29	146.747	-11.331	-9.228	1.00	0.00
ATOM 374	1HB	ASN A	29	149.620	-10.641	-9.214	1.00	0.00
ATOM 375	2HB	ASN A	29	149.253	-12.343	-8.946	1.00	0.00
ATOM 376	1HD2	ASN A	29	147.909	-9.774	-10.996	1.00	0.00
ATOM 377	2HD2	ASN A	29	147.987	-10.675	-12.468	1.00	0.00
ATOM 378	N	PRO A	30	148.467	-11.421	-6.372	1.00	0.00
ATOM 379	CA	PRO A	30	148.507	-12.026	-5.039	1.00	0.00
ATOM 380	C	PRO A	30	147.460	-11.429	-4.099	1.00	0.00
ATOM 381	O	PRO A	30	147.579	-10.276	-3.682	1.00	0.00
ATOM 382	CB	PRO A	30	149.915	-11.691	-4.549	1.00	0.00
ATOM 383	CG	PRO A	30	150.256	-10.414	-5.236	1.00	0.00
ATOM 384	CD	PRO A	30	149.572	-10.463	-6.576	1.00	0.00
ATOM 385	HA	PRO A	30	148.384	-13.098	-5.085	1.00	0.00
ATOM 386	1HB	PRO A	30	149.908	-11.575	-3.475	1.00	0.00
ATOM 387	2HB	PRO A	30	150.595	-12.482	-4.827	1.00	0.00
ATOM 388	1HG	PRO A	30	149.888	-9.578	-4.658	1.00	0.00
ATOM 389	2HG	PRO A	30	151.326	-10.340	-5.363	1.00	0.00

ATOM 390	1HD	PRO A	30	149.191	-9.487	-6.840	1.00	0.00
ATOM 391	2HD	PRO A	30	150.254	-10.817	-7.334	1.00	0.00
ATOM 392	N	PRO A	31	146.417	-12.204	-3.751	1.00	0.00
ATOM 393	CA	PRO A	31	145.353	-11.735	-2.857	1.00	0.00
ATOM 394	C	PRO A	31	145.844	-11.540	-1.426	1.00	0.00
ATOM 395	O	PRO A	31	145.741	-12.443	-0.595	1.00	0.00
ATOM 396	CB	PRO A	31	144.313	-12.857	-2.917	1.00	0.00
ATOM 397	CG	PRO A	31	145.088	-14.071	-3.297	1.00	0.00
ATOM 398	CD	PRO A	31	146.191	-13.592	-4.199	1.00	0.00
ATOM 399	HA	PRO A	31	144.914	-10.815	-3.213	1.00	0.00
ATOM 400	1HB	PRO A	31	143.847	-12.973	-1.949	1.00	0.00
ATOM 401	2HB	PRO A	31	143.565	-12.620	-3.658	1.00	0.00
ATOM 402	1HG	PRO A	31	145.501	-14.535	-2.413	1.00	0.00
ATOM 403	2HG	PRO A	31	144.449	-14.766	-3.823	1.00	0.00
ATOM 404	1HD	PRO A	31	147.078	-14.192	-4.061	1.00	0.00
ATOM 405	2HD	PRO A	31	145.872	-13.617	-5.230	1.00	0.00
ATOM 406	N	PHE A	32	146.377	-10.356	-1.146	1.00	0.00
ATOM 407	CA	PHE A	32	146.885	-10.041	0.185	1.00	0.00
ATOM 408	C	PHE A	32	145.947	-9.083	0.912	1.00	0.00
ATOM 409	O	PHE A	32	144.998	-8.562	0.324	1.00	0.00
ATOM 410	CB	PHE A	32	148.283	-9.430	0.090	1.00	0.00
ATOM 411	CG	PHE A	32	148.404	-8.366	-0.964	1.00	0.00
ATOM 412	CD1	PHE A	32	147.687	-7.185	-0.859	1.00	0.00
ATOM 413	CD2	PHE A	32	149.233	-8.548	-2.059	1.00	0.00
ATOM 414	CE1	PHE A	32	147.796	-6.205	-1.827	1.00	0.00
ATOM 415	CE2	PHE A	32	149.346	-7.572	-3.030	1.00	0.00
ATOM 416	CZ	PHE A	32	148.626	-6.397	-2.914	1.00	0.00
ATOM 417	H	PHE A	32	146.430	-9.677	-1.850	1.00	0.00
ATOM 418	HA	PHE A	32	146.941	-10.963	0.744	1.00	0.00

ATOM 419	1HB	PHE A	32	148.540	-8.987	1.040	1.00	0.00
ATOM 420	2HB	PHE A	32	148.994	-10.210	-0.141	1.00	0.00
ATOM 421	HD1	PHE A	32	147.038	-7.032	-0.010	1.00	0.00
ATOM 422	HD2	PHE A	32	149.796	-9.465	-2.151	1.00	0.00
ATOM 423	HE1	PHE A	32	147.232	-5.289	-1.734	1.00	0.00
ATOM 424	HE2	PHE A	32	149.995	-7.724	-3.879	1.00	0.00
ATOM 425	HZ	PHE A	32	148.712	-5.632	-3.672	1.00	0.00
ATOM 426	N	TYR A	33	146.217	-8.856	2.193	1.00	0.00
ATOM 427	CA	TYR A	33	145.397	-7.958	2.999	1.00	0.00
ATOM 428	C	TYR A	33	146.269	-6.990	3.793	1.00	0.00
ATOM 429	O	TYR A	33	147.270	-7.387	4.389	1.00	0.00
ATOM 430	CB	TYR A	33	144.511	-8.763	3.952	1.00	0.00
ATOM 431	CG	TYR A	33	143.249	-9.290	3.306	1.00	0.00
ATOM 432	CD1	TYR A	33	142.903	-10.632	3.406	1.00	0.00
ATOM 433	CD2	TYR A	33	142.405	-8.447	2.595	1.00	0.00
ATOM 434	CE1	TYR A	33	141.751	-11.118	2.817	1.00	0.00
ATOM 435	CE2	TYR A	33	141.251	-8.925	2.003	1.00	0.00
ATOM 436	CZ	TYR A	33	140.929	-10.261	2.116	1.00	0.00
ATOM 437	OH	TYR A	33	139.781	-10.740	1.529	1.00	0.00
ATOM 438	H	TYR A	33	146.987	-9.300	2.605	1.00	0.00
ATOM 439	HA	TYR A	33	144.769	-7.392	2.329	1.00	0.00
ATOM 440	1HB	TYR A	33	145.069	-9.608	4.325	1.00	0.00
ATOM 441	2HB	TYR A	33	144.222	-8.134	4.780	1.00	0.00
ATOM 442	HD1	TYR A	33	143.549	-11.302	3.956	1.00	0.00
ATOM 443	HD2	TYR A	33	142.661	-7.401	2.507	1.00	0.00
ATOM 444	HE1	TYR A	33	141.500	-12.165	2.907	1.00	0.00
ATOM 445	HE2	TYR A	33	140.609	-8.253	1.455	1.00	0.00
ATOM 446	HH	TYR A	33	139.736	-10.436	0.620	1.00	0.00
ATOM 447	N	GLY A	34	145.880	-5.719	3.796	1.00	0.00

ATOM 448	CA	GLY A	34	146.637	-4.715	4.519	1.00	0.00
ATOM 449	C	GLY A	34	145.778	-3.546	4.957	1.00	0.00
ATOM 450	O	GLY A	34	144.551	-3.643	4.984	1.00	0.00
ATOM 451	H	GLY A	34	145.074	-5.462	3.302	1.00	0.00
ATOM 452	1HA	GLY A	34	147.077	-5.172	5.393	1.00	0.00
ATOM 453	2HA	GLY A	34	147.427	-4.348	3.881	1.00	0.00
ATOM 454	N	VAL A	35	146.423	-2.435	5.301	1.00	0.00
ATOM 455	CA	VAL A	35	145.710	-1.242	5.740	1.00	0.00
ATOM 456	C	VAL A	35	146.363	0.022	5.187	1.00	0.00
ATOM 457	O	VAL A	35	147.577	0.070	4.991	1.00	0.00
ATOM 458	CB	VAL A	35	145.657	-1.154	7.279	1.00	0.00
ATOM 459	CG1	VAL A	35	147.060	-1.060	7.861	1.00	0.00
ATOM 460	CG2	VAL A	35	144.809	0.029	7.720	1.00	0.00
ATOM 461	H	VAL A	35	147.402	-2.420	5.259	1.00	0.00
ATOM 462	HA	VAL A	35	144.698	-1.304	5.370	1.00	0.00
ATOM 463	HB	VAL A	35	145.199	-2.057	7.654	1.00	0.00
ATOM 464	1HG1	VAL A	35	147.690	-1.812	7.406	1.00	0.00
ATOM 465	2HG1	VAL A	35	147.020	-1.222	8.927	1.00	0.00
ATOM 466	3HG1	VAL A	35	147.468	-0.080	7.660	1.00	0.00
ATOM 467	1HG2	VAL A	35	143.784	-0.133	7.423	1.00	0.00
ATOM 468	2HG2	VAL A	35	145.180	0.932	7.257	1.00	0.00
ATOM 469	3HG2	VAL A	35	144.861	0.129	8.795	1.00	0.00
ATOM 470	N	ILE A	36	145.548	1.042	4.939	1.00	0.00
ATOM 471	CA	ILE A	36	146.046	2.306	4.409	1.00	0.00
ATOM 472	C	ILE A	36	146.970	2.992	5.410	1.00	0.00
ATOM 473	O	ILE A	36	146.688	3.027	6.607	1.00	0.00
ATOM 474	CB	ILE A	36	144.891	3.262	4.051	1.00	0.00
ATOM 475	CG1	ILE A	36	143.876	2.558	3.149	1.00	0.00
ATOM 476	CG2	ILE A	36	145.430	4.514	3.374	1.00	0.00

ATOM 477	CD1	ILE A	36	142.709	3.435	2.752	1.00	0.00
ATOM 478	H	ILE A	36	144.590	0.943	5.117	1.00	0.00
ATOM 479	HA	ILE A	36	146.603	2.093	3.508	1.00	0.00
ATOM 480	HB	ILE A	36	144.404	3.561	4.967	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.369	2.234	2.246	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.482	1.695	3.667	1.00	0.00
ATOM 483	1HG2	ILE A	36	146.162	4.235	2.630	1.00	0.00
ATOM 484	2HG2	ILE A	36	145.893	5.152	4.112	1.00	0.00
ATOM 485	3HG2	ILE A	36	144.618	5.044	2.898	1.00	0.00
ATOM 486	1HD1	ILE A	36	142.535	3.343	1.690	1.00	0.00
ATOM 487	2HD1	ILE A	36	142.935	4.464	2.992	1.00	0.00
ATOM 488	3HD1	ILE A	36	141.826	3.126	3.290	1.00	0.00
ATOM 489	N	ARG A	37	148.076	3.535	4.910	1.00	0.00
ATOM 490	CA	ARG A	37	149.042	4.220	5.761	1.00	0.00
ATOM 491	C	ARG A	37	149.240	5.664	5.308	1.00	0.00
ATOM 492	O	ARG A	37	148.974	6.601	6.060	1.00	0.00
ATOM 493	CB	ARG A	37	150.382	3.480	5.742	1.00	0.00
ATOM 494	CG	ARG A	37	150.258	1.992	6.024	1.00	0.00
ATOM 495	CD	ARG A	37	149.607	1.733	7.373	1.00	0.00
ATOM 496	NE	ARG A	37	150.302	2.420	8.458	1.00	0.00
ATOM 497	CZ	ARG A	37	149.765	2.653	9.653	1.00	0.00
ATOM 498	NH1	ARG A	37	148.527	2.255	9.921	1.00	0.00
ATOM 499	NH2	ARG A	37	150.467	3.285	10.584	1.00	0.00
ATOM 500	H	ARG A	37	148.246	3.474	3.947	1.00	0.00
ATOM 501	HA	ARG A	37	148.656	4.221	6.768	1.00	0.00
ATOM 502	1HB	ARG A	37	150.835	3.605	4.769	1.00	0.00
ATOM 503	2HB	ARG A	37	151.030	3.914	6.489	1.00	0.00
ATOM 504	1HG	ARG A	37	149.657	1.537	5.251	1.00	0.00
ATOM 505	2HG	ARG A	37	151.245	1.553	6.020	1.00	0.00

ATOM 506	1HD	ARG A	37	148.585	2.079	7.337	1.00	0.00
ATOM 507	2HD	ARG A	37	149.620	0.670	7.565	1.00	0.00
ATOM 508	HE	ARG A	37	151.219	2.724	8.288	1.00	0.00
ATOM 509	1HH1	ARG A	37	147.992	1.778	9.224	1.00	0.00
ATOM 510	2HH1	ARG A	37	148.129	2.432	10.820	1.00	0.00
ATOM 511	1HH2	ARG A	37	151.400	3.585	10.387	1.00	0.00
ATOM 512	2HH2	ARG A	37	150.063	3.460	11.482	1.00	0.00
ATOM 513	N	TRP A	38	149.705	5.835	4.075	1.00	0.00
ATOM 514	CA	TRP A	38	149.938	7.166	3.525	1.00	0.00
ATOM 515	C	TRP A	38	149.254	7.323	2.169	1.00	0.00
ATOM 516	O	TRP A	38	149.360	6.454	1.304	1.00	0.00
ATOM 517	CB	TRP A	38	151.441	7.431	3.388	1.00	0.00
ATOM 518	CG	TRP A	38	151.763	8.666	2.600	1.00	0.00
ATOM 519	CD1	TRP A	38	151.926	9.931	3.086	1.00	0.00
ATOM 520	CD2	TRP A	38	151.955	8.752	1.183	1.00	0.00
ATOM 521	NE1	TRP A	38	152.207	10.799	2.058	1.00	0.00
ATOM 522	CE2	TRP A	38	152.231	10.098	0.880	1.00	0.00
ATOM 523	CE3	TRP A	38	151.921	7.821	0.141	1.00	0.00
ATOM 524	CZ2	TRP A	38	152.471	10.535	-0.422	1.00	0.00
ATOM 525	CZ3	TRP A	38	152.159	8.254	-1.149	1.00	0.00
ATOM 526	CH2	TRP A	38	152.431	9.601	-1.420	1.00	0.00
ATOM 527	H	TRP A	38	149.898	5.049	3.523	1.00	0.00
ATOM 528	HA	TRP A	38	149.516	7.885	4.211	1.00	0.00
ATOM 529	1HB	TRP A	38	151.871	7.544	4.373	1.00	0.00
ATOM 530	2HB	TRP A	38	151.904	6.589	2.894	1.00	0.00
ATOM 531	HD1	TRP A	38	151.842	10.198	4.129	1.00	0.00
ATOM 532	HE1	TRP A	38	152.366	11.761	2.153	1.00	0.00
ATOM 533	HE3	TRP A	38	151.713	6.779	0.331	1.00	0.00
ATOM 534	HZ2	TRP A	38	152.679	11.570	-0.648	1.00	0.00

ATOM 535	HZ3	TRP	A	38	152.138	7.548	-1.966	1.00	0.00
ATOM 536	HH2	TRP	A	38	152.612	9.895	-2.444	1.00	0.00
ATOM 537	N	ILE	A	39	148.559	8.442	1.993	1.00	0.00
ATOM 538	CA	ILE	A	39	147.864	8.725	0.744	1.00	0.00
ATOM 539	C	ILE	A	39	148.314	10.064	0.170	1.00	0.00
ATOM 540	O	ILE	A	39	147.947	11.122	0.681	1.00	0.00
ATOM 541	CB	ILE	A	39	146.337	8.750	0.942	1.00	0.00
ATOM 542	CG1	ILE	A	39	145.876	7.502	1.698	1.00	0.00
ATOM 543	CG2	ILE	A	39	145.630	8.855	-0.400	1.00	0.00
ATOM 544	CD1	ILE	A	39	144.499	7.639	2.309	1.00	0.00
ATOM 545	H	ILE	A	39	148.519	9.097	2.721	1.00	0.00
ATOM 546	HA	ILE	A	39	148.104	7.941	0.041	1.00	0.00
ATOM 547	HB	ILE	A	39	146.085	9.626	1.522	1.00	0.00
ATOM 548	1HG1	ILE	A	39	145.854	6.665	1.016	1.00	0.00
ATOM 549	2HG1	ILE	A	39	146.575	7.294	2.494	1.00	0.00
ATOM 550	1HG2	ILE	A	39	146.098	9.626	-0.994	1.00	0.00
ATOM 551	2HG2	ILE	A	39	144.590	9.104	-0.243	1.00	0.00
ATOM 552	3HG2	ILE	A	39	145.699	7.909	-0.918	1.00	0.00
ATOM 553	1HD1	ILE	A	39	144.001	8.499	1.886	1.00	0.00
ATOM 554	2HD1	ILE	A	39	144.590	7.764	3.378	1.00	0.00
ATOM 555	3HD1	ILE	A	39	143.922	6.750	2.099	1.00	0.00
ATOM 556	N	GLY	A	40	149.115	10.011	-0.889	1.00	0.00
ATOM 557	CA	GLY	A	40	149.604	11.231	-1.504	1.00	0.00
ATOM 558	C	GLY	A	40	150.212	10.994	-2.873	1.00	0.00
ATOM 559	O	GLY	A	40	150.068	9.916	-3.447	1.00	0.00
ATOM 560	H	GLY	A	40	149.379	9.141	-1.252	1.00	0.00
ATOM 561	1HA	GLY	A	40	148.785	11.925	-1.603	1.00	0.00
ATOM 562	2HA	GLY	A	40	150.353	11.667	-0.862	1.00	0.00
ATOM 563	N	GLN	A	41	150.892	12.010	-3.394	1.00	0.00

ATOM 564	CA	GLN A	41	151.525	11.919	-4.703	1.00	0.00
ATOM 565	C	GLN A	41	153.000	12.311	-4.618	1.00	0.00
ATOM 566	O	GLN A	41	153.325	13.461	-4.321	1.00	0.00
ATOM 567	CB	GLN A	41	150.799	12.825	-5.696	1.00	0.00
ATOM 568	CG	GLN A	41	149.288	12.653	-5.685	1.00	0.00
ATOM 569	CD	GLN A	41	148.551	13.969	-5.825	1.00	0.00
ATOM 570	OE1	GLN A	41	148.474	14.755	-4.881	1.00	0.00
ATOM 571	NE2	GLN A	41	148.004	14.216	-7.009	1.00	0.00
ATOM 572	H	GLN A	41	150.968	12.844	-2.886	1.00	0.00
ATOM 573	HA	GLN A	41	151.451	10.897	-5.040	1.00	0.00
ATOM 574	1HB	GLN A	41	151.023	13.853	-5.456	1.00	0.00
ATOM 575	2HB	GLN A	41	151.158	12.610	-6.690	1.00	0.00
ATOM 576	1HG	GLN A	41	149.005	12.010	-6.504	1.00	0.00
ATOM 577	2HG	GLN A	41	148.999	12.192	-4.752	1.00	0.00
ATOM 578	1HE2	GLN A	41	148.106	13.544	-7.715	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.522	15.061	-7.130	1.00	0.00
ATOM 580	N	PRO A	42	153.917	11.361	-4.876	1.00	0.00
ATOM 581	CA	PRO A	42	155.360	11.623	-4.822	1.00	0.00
ATOM 582	C	PRO A	42	155.779	12.746	-5.766	1.00	0.00
ATOM 583	O	PRO A	42	155.066	13.071	-6.715	1.00	0.00
ATOM 584	CB	PRO A	42	155.986	10.295	-5.261	1.00	0.00
ATOM 585	CG	PRO A	42	154.937	9.272	-5.000	1.00	0.00
ATOM 586	CD	PRO A	42	153.626	9.962	-5.237	1.00	0.00
ATOM 587	HA	PRO A	42	155.680	11.861	-3.819	1.00	0.00
ATOM 588	1HB	PRO A	42	156.239	10.344	-6.311	1.00	0.00
ATOM 589	2HB	PRO A	42	156.877	10.105	-4.680	1.00	0.00
ATOM 590	1HG	PRO A	42	155.053	8.442	-5.681	1.00	0.00
ATOM 591	2HG	PRO A	42	155.002	8.931	-3.976	1.00	0.00
ATOM 592	1HD	PRO A	42	153.340	9.882	-6.276	1.00	0.00



ATOM 593	2HD	PRO A	42	152.859	9.550	-4.598	1.00	0.00
ATOM 594	N	PRO A	43	156.951	13.355	-5.515	1.00	0.00
ATOM 595	CA	PRO A	43	157.466	14.446	-6.347	1.00	0.00
ATOM 596	C	PRO A	43	157.941	13.958	-7.711	1.00	0.00
ATOM 597	O	PRO A	43	159.115	13.636	-7.891	1.00	0.00
ATOM 598	CB	PRO A	43	158.643	14.986	-5.535	1.00	0.00
ATOM 599	CG	PRO A	43	159.098	13.830	-4.714	1.00	0.00
ATOM 600	CD	PRO A	43	157.863	13.027	-4.403	1.00	0.00
ATOM 601	HA	PRO A	43	156.729	15.225	-6.481	1.00	0.00
ATOM 602	1HB	PRO A	43	159.419	15.323	-6.207	1.00	0.00
ATOM 603	2HB	PRO A	43	158.312	15.805	-4.915	1.00	0.00
ATOM 604	1HG	PRO A	43	159.800	13.233	-5.277	1.00	0.00
ATOM 605	2HG	PRO A	43	159.553	14.185	-3.800	1.00	0.00
ATOM 606	1HD	PRO A	43	158.092	11.973	-4.391	1.00	0.00
ATOM 607	2HD	PRO A	43	157.442	13.334	-3.457	1.00	0.00
ATOM 608	N	GLY A	44	157.022	13.906	-8.667	1.00	0.00
ATOM 609	CA	GLY A	44	157.369	13.457	-10.002	1.00	0.00
ATOM 610	C	GLY A	44	156.170	12.942	-10.771	1.00	0.00
ATOM 611	O	GLY A	44	155.925	13.359	-11.903	1.00	0.00
ATOM 612	H	GLY A	44	156.101	14.175	-8.467	1.00	0.00
ATOM 613	1HA	GLY A	44	157.804	14.281	-10.546	1.00	0.00
ATOM 614	2HA	GLY A	44	158.100	12.664	-9.924	1.00	0.00
ATOM 615	N	LEU A	45	155.420	12.034	-10.156	1.00	0.00
ATOM 616	CA	LEU A	45	154.240	11.463	-10.793	1.00	0.00
ATOM 617	C	LEU A	45	152.994	11.726	-9.956	1.00	0.00
ATOM 618	O	LEU A	45	152.847	11.184	-8.860	1.00	0.00
ATOM 619	CB	LEU A	45	154.422	9.959	-10.999	1.00	0.00
ATOM 620	CG	LEU A	45	154.906	9.191	-9.766	1.00	0.00
ATOM 621	CD1	LEU A	45	154.533	7.718	-9.873	1.00	0.00

ATOM 622	CD2	LEU A	45	156.411	9.354	-9.592	1.00	0.00
ATOM 623	H	LEU A	45	155.664	11.743	-9.251	1.00	0.00
ATOM 624	HA	LEU A	45	154.119	11.938	-11.754	1.00	0.00
ATOM 625	1HB	LEU A	45	153.476	9.542	-11.310	1.00	0.00
ATOM 626	2HB	LEU A	45	155.140	9.810	-11.791	1.00	0.00
ATOM 627	HG	LEU A	45	154.421	9.594	-8.889	1.00	0.00
ATOM 628	1HD1	LEU A	45	155.414	7.111	-9.728	1.00	0.00
ATOM 629	2HD1	LEU A	45	154.117	7.521	-10.849	1.00	0.00
ATOM 630	3HD1	LEU A	45	153.803	7.477	-9.114	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.770	10.126	-10.257	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.904	8.422	-9.824	1.00	0.00
ATOM 633	3HD2	LEU A	45	156.626	9.631	-8.571	1.00	0.00
ATOM 634	N	ASN A	46	152.096	12.558	-10.474	1.00	0.00
ATOM 635	CA	ASN A	46	150.868	12.879	-9.761	1.00	0.00
ATOM 636	C	ASN A	46	149.905	11.697	-9.796	1.00	0.00
ATOM 637	O	ASN A	46	149.319	11.390	-10.834	1.00	0.00
ATOM 638	CB	ASN A	46	150.205	14.113	-10.378	1.00	0.00
ATOM 639	CG	ASN A	46	149.419	14.917	-9.361	1.00	0.00
ATOM 640	OD1	ASN A	46	148.199	15.047	-9.464	1.00	0.00
ATOM 641	ND2	ASN A	46	150.117	15.463	-8.372	1.00	0.00
ATOM 642	H	ASN A	46	152.264	12.961	-11.350	1.00	0.00
ATOM 643	HA	ASN A	46	151.123	13.092	-8.733	1.00	0.00
ATOM 644	1HB	ASN A	46	150.967	14.749	-10.800	1.00	0.00
ATOM 645	2HB	ASN A	46	149.530	13.797	-11.160	1.00	0.00
ATOM 646	1HD2	ASN A	46	151.086	15.318	-8.353	1.00	0.00
ATOM 647	2HD2	ASN A	46	149.634	15.989	-7.700	1.00	0.00
ATOM 648	N	GLU A	47	149.747	11.040	-8.654	1.00	0.00
ATOM 649	CA	GLU A	47	148.857	9.891	-8.546	1.00	0.00
ATOM 650	C	GLU A	47	148.612	9.532	-7.084	1.00	0.00

ATOM 651	O	GLU A	47	149.551	9.232	-6.346	1.00	0.00
ATOM 652	CB	GLU A	47	149.445	8.687	-9.288	1.00	0.00
ATOM 653	CG	GLU A	47	150.953	8.556	-9.150	1.00	0.00
ATOM 654	CD	GLU A	47	151.556	7.633	-10.192	1.00	0.00
ATOM 655	OE1	GLU A	47	151.850	6.467	-9.853	1.00	0.00
ATOM 656	OE2	GLU A	47	151.731	8.076	-11.347	1.00	0.00
ATOM 657	H	GLU A	47	150.243	11.335	-7.862	1.00	0.00
ATOM 658	HA	GLU A	47	147.916	10.158	-9.000	1.00	0.00
ATOM 659	1HB	GLU A	47	148.991	7.786	-8.902	1.00	0.00
ATOM 660	2HB	GLU A	47	149.208	8.776	-10.338	1.00	0.00
ATOM 661	1HG	GLU A	47	151.398	9.534	-9.258	1.00	0.00
ATOM 662	2HG	GLU A	47	151.182	8.166	-8.169	1.00	0.00
ATOM 663	N	VAL A	48	147.351	9.557	-6.671	1.00	0.00
ATOM 664	CA	VAL A	48	146.997	9.226	-5.298	1.00	0.00
ATOM 665	C	VAL A	48	147.343	7.775	-4.989	1.00	0.00
ATOM 666	O	VAL A	48	146.591	6.861	-5.329	1.00	0.00
ATOM 667	CB	VAL A	48	145.499	9.456	-5.029	1.00	0.00
ATOM 668	CG1	VAL A	48	145.192	9.299	-3.547	1.00	0.00
ATOM 669	CG2	VAL A	48	145.072	10.828	-5.527	1.00	0.00
ATOM 670	H	VAL A	48	146.643	9.799	-7.304	1.00	0.00
ATOM 671	HA	VAL A	48	147.567	9.869	-4.641	1.00	0.00
ATOM 672	HB	VAL A	48	144.938	8.708	-5.570	1.00	0.00
ATOM 673	1HG1	VAL A	48	144.163	9.571	-3.362	1.00	0.00
ATOM 674	2HG1	VAL A	48	145.843	9.943	-2.974	1.00	0.00
ATOM 675	3HG1	VAL A	48	145.351	8.273	-3.252	1.00	0.00
ATOM 676	1HG2	VAL A	48	144.130	11.099	-5.073	1.00	0.00
ATOM 677	2HG2	VAL A	48	144.958	10.801	-6.601	1.00	0.00
ATOM 678	3HG2	VAL A	48	145.822	11.558	-5.263	1.00	0.00
ATOM 679	N	LEU A	49	148.487	7.569	-4.345	1.00	0.00

ATOM 680	CA	LEU A	49	148.934	6.227	-3.994	1.00	0.00
ATOM 681	C	LEU A	49	148.788	5.983	-2.498	1.00	0.00
ATOM 682	O	LEU A	49	149.449	6.633	-1.687	1.00	0.00
ATOM 683	CB	LEU A	49	150.390	6.023	-4.417	1.00	0.00
ATOM 684	CG	LEU A	49	150.667	6.237	-5.906	1.00	0.00
ATOM 685	CD1	LEU A	49	152.113	6.656	-6.125	1.00	0.00
ATOM 686	CD2	LEU A	49	150.352	4.974	-6.693	1.00	0.00
ATOM 687	H	LEU A	49	149.045	8.336	-4.102	1.00	0.00
ATOM 688	HA	LEU A	49	148.313	5.521	-4.524	1.00	0.00
ATOM 689	1HB	LEU A	49	151.005	6.711	-3.855	1.00	0.00
ATOM 690	2HB	LEU A	49	150.680	5.015	-4.162	1.00	0.00
ATOM 691	HG	LEU A	49	150.032	7.029	-6.275	1.00	0.00
ATOM 692	1HD1	LEU A	49	152.177	7.734	-6.140	1.00	0.00
ATOM 693	2HD1	LEU A	49	152.464	6.261	-7.067	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.725	6.271	-5.323	1.00	0.00
ATOM 695	1HD2	LEU A	49	151.242	4.367	-6.770	1.00	0.00
ATOM 696	2HD2	LEU A	49	150.012	5.241	-7.682	1.00	0.00
ATOM 697	3HD2	LEU A	49	149.579	4.416	-6.185	1.00	0.00
ATOM 698	N	ALA A	50	147.919	5.047	-2.139	1.00	0.00
ATOM 699	CA	ALA A	50	147.689	4.724	-0.738	1.00	0.00
ATOM 700	C	ALA A	50	148.600	3.591	-0.281	1.00	0.00
ATOM 701	O	ALA A	50	148.489	2.461	-0.758	1.00	0.00
ATOM 702	CB	ALA A	50	146.230	4.357	-0.514	1.00	0.00
ATOM 703	H	ALA A	50	147.421	4.564	-2.831	1.00	0.00
ATOM 704	HA	ALA A	50	147.909	5.608	-0.156	1.00	0.00
ATOM 705	1HB	ALA A	50	145.901	4.754	0.435	1.00	0.00
ATOM 706	2HB	ALA A	50	146.126	3.282	-0.509	1.00	0.00
ATOM 707	3HB	ALA A	50	145.628	4.775	-1.307	1.00	0.00
ATOM 708	N	GLY A	51	149.502	3.899	0.645	1.00	0.00

ATOM 709	CA	GLY A	51	150.420	2.895	1.151	1.00	0.00
ATOM 710	C	GLY A	51	149.722	1.838	1.983	1.00	0.00
ATOM 711	O	GLY A	51	149.241	2.120	3.081	1.00	0.00
ATOM 712	H	GLY A	51	149.545	4.816	0.988	1.00	0.00
ATOM 713	1HA	GLY A	51	150.907	2.415	0.315	1.00	0.00
ATOM 714	2HA	GLY A	51	151.168	3.381	1.759	1.00	0.00
ATOM 715	N	LEU A	52	149.667	0.617	1.461	1.00	0.00
ATOM 716	CA	LEU A	52	149.023	-0.486	2.164	1.00	0.00
ATOM 717	C	LEU A	52	150.052	-1.340	2.897	1.00	0.00
ATOM 718	O	LEU A	52	151.062	-1.744	2.320	1.00	0.00
ATOM 719	CB	LEU A	52	148.231	-1.352	1.183	1.00	0.00
ATOM 720	CG	LEU A	52	146.974	-0.695	0.609	1.00	0.00
ATOM 721	CD1	LEU A	52	146.452	-1.490	-0.579	1.00	0.00
ATOM 722	CD2	LEU A	52	145.903	-0.569	1.680	1.00	0.00
ATOM 723	H	LEU A	52	150.068	0.453	0.582	1.00	0.00
ATOM 724	HA	LEU A	52	148.342	-0.064	2.889	1.00	0.00
ATOM 725	1HB	LEU A	52	148.882	-1.616	0.362	1.00	0.00
ATOM 726	2HB	LEU A	52	147.935	-2.258	1.692	1.00	0.00
ATOM 727	HG	LEU A	52	147.222	0.298	0.262	1.00	0.00
ATOM 728	1HD1	LEU A	52	145.685	-2.174	-0.246	1.00	0.00
ATOM 729	2HD1	LEU A	52	147.263	-2.047	-1.023	1.00	0.00
ATOM 730	3HD1	LEU A	52	146.037	-0.812	-1.311	1.00	0.00
ATOM 731	1HD2	LEU A	52	145.344	0.343	1.526	1.00	0.00
ATOM 732	2HD2	LEU A	52	146.368	-0.544	2.655	1.00	0.00
ATOM 733	3HD2	LEU A	52	145.234	-1.414	1.622	1.00	0.00
ATOM 734	N	GLU A	53	149.790	-1.612	4.171	1.00	0.00
ATOM 735	CA	GLU A	53	150.694	-2.418	4.983	1.00	0.00
ATOM 736	C	GLU A	53	150.200	-3.859	5.076	1.00	0.00
ATOM 737	O	GLU A	53	149.205	-4.142	5.744	1.00	0.00

ATOM 738	CB	GLU A	53	150.826	-1.819	6.384	1.00	0.00
ATOM 739	CG	GLU A	53	151.783	-2.584	7.284	1.00	0.00
ATOM 740	CD	GLU A	53	151.317	-2.629	8.726	1.00	0.00
ATOM 741	OE1	GLU A	53	151.200	-1.550	9.345	1.00	0.00
ATOM 742	OE2	GLU A	53	151.071	-3.742	9.236	1.00	0.00
ATOM 743	H	GLU A	53	148.969	-1.262	4.575	1.00	0.00
ATOM 744	HA	GLU A	53	151.662	-2.413	4.505	1.00	0.00
ATOM 745	1HB	GLU A	53	151.182	-0.804	6.297	1.00	0.00
ATOM 746	2HB	GLU A	53	149.854	-1.812	6.853	1.00	0.00
ATOM 747	1HG	GLU A	53	151.870	-3.597	6.919	1.00	0.00
ATOM 748	2HG	GLU A	53	152.751	-2.105	7.248	1.00	0.00
ATOM 749	N	LEU A	54	150.903	-4.765	4.405	1.00	0.00
ATOM 750	CA	LEU A	54	150.537	-6.176	4.412	1.00	0.00
ATOM 751	C	LEU A	54	150.705	-6.775	5.805	1.00	0.00
ATOM 752	O	LEU A	54	151.577	-6.360	6.568	1.00	0.00
ATOM 753	CB	LEU A	54	151.389	-6.950	3.404	1.00	0.00
ATOM 754	CG	LEU A	54	151.447	-6.342	2.002	1.00	0.00
ATOM 755	CD1	LEU A	54	152.766	-6.680	1.327	1.00	0.00
ATOM 756	CD2	LEU A	54	150.276	-6.829	1.162	1.00	0.00
ATOM 757	H	LEU A	54	151.686	-4.477	3.891	1.00	0.00
ATOM 758	HA	LEU A	54	149.498	-6.250	4.124	1.00	0.00
ATOM 759	1HB	LEU A	54	152.396	-7.013	3.790	1.00	0.00
ATOM 760	2HB	LEU A	54	150.990	-7.951	3.321	1.00	0.00
ATOM 761	HG	LEU A	54	151.378	-5.266	2.081	1.00	0.00
ATOM 762	1HD1	LEU A	54	153.136	-7.620	1.710	1.00	0.00
ATOM 763	2HD1	LEU A	54	153.485	-5.901	1.531	1.00	0.00
ATOM 764	3HD1	LEU A	54	152.615	-6.761	0.261	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.455	-7.099	1.811	1.00	0.00
ATOM 766	2HD2	LEU A	54	150.578	-7.692	0.589	1.00	0.00

ATOM 767	3HD2	LEU	A	54	149.962	-6.043	0.492	1.00	0.00
ATOM 768	N	GLU	A	55	149.864	-7.752	6.128	1.00	0.00
ATOM 769	CA	GLU	A	55	149.920	-8.408	7.429	1.00	0.00
ATOM 770	C	GLU	A	55	151.075	-9.402	7.489	1.00	0.00
ATOM 771	O	GLU	A	55	151.677	-9.606	8.543	1.00	0.00
ATOM 772	CB	GLU	A	55	148.600	-9.124	7.719	1.00	0.00
ATOM 773	CG	GLU	A	55	147.559	-8.237	8.381	1.00	0.00
ATOM 774	CD	GLU	A	55	146.145	-8.576	7.952	1.00	0.00
ATOM 775	OE1	GLU	A	55	145.281	-7.675	7.989	1.00	0.00
ATOM 776	OE2	GLU	A	55	145.902	-9.743	7.576	1.00	0.00
ATOM 777	H	GLU	A	55	149.191	-8.038	5.477	1.00	0.00
ATOM 778	HA	GLU	A	55	150.077	-7.646	8.178	1.00	0.00
ATOM 779	1HB	GLU	A	55	148.191	-9.491	6.789	1.00	0.00
ATOM 780	2HB	GLU	A	55	148.794	-9.962	8.371	1.00	0.00
ATOM 781	1HG	GLU	A	55	147.631	-8.356	9.452	1.00	0.00
ATOM 782	2HG	GLU	A	55	147.762	-7.209	8.120	1.00	0.00
ATOM 783	N	ASP	A	56	151.380	-10.017	6.351	1.00	0.00
ATOM 784	CA	ASP	A	56	152.464	-10.989	6.275	1.00	0.00
ATOM 785	C	ASP	A	56	153.720	-10.358	5.682	1.00	0.00
ATOM 786	O	ASP	A	56	153.639	-9.461	4.844	1.00	0.00
ATOM 787	CB	ASP	A	56	152.038	-12.194	5.434	1.00	0.00
ATOM 788	CG	ASP	A	56	152.656	-13.489	5.924	1.00	0.00
ATOM 789	OD1	ASP	A	56	151.930	-14.502	5.999	1.00	0.00
ATOM 790	OD2	ASP	A	56	153.866	-13.489	6.233	1.00	0.00
ATOM 791	H	ASP	A	56	150.865	-9.811	5.544	1.00	0.00
ATOM 792	HA	ASP	A	56	152.682	-11.322	7.278	1.00	0.00
ATOM 793	1HB	ASP	A	56	150.963	-12.292	5.474	1.00	0.00
ATOM 794	2HB	ASP	A	56	152.343	-12.036	4.409	1.00	0.00
ATOM 795	N	GLU	A	57	154.880	-10.835	6.122	1.00	0.00

ATOM 796	CA	GLU A	57	156.153	-10.318	5.635	1.00	0.00
ATOM 797	C	GLU A	57	156.464	-10.862	4.244	1.00	0.00
ATOM 798	O	GLU A	57	157.189	-11.845	4.098	1.00	0.00
ATOM 799	CB	GLU A	57	157.281	-10.684	6.601	1.00	0.00
ATOM 800	CG	GLU A	57	157.059	-10.172	8.016	1.00	0.00
ATOM 801	CD	GLU A	57	156.643	-11.271	8.975	1.00	0.00
ATOM 802	OE1	GLU A	57	155.525	-11.806	8.817	1.00	0.00
ATOM 803	OE2	GLU A	57	157.435	-11.596	9.885	1.00	0.00
ATOM 804	H	GLU A	57	154.880	-11.552	6.790	1.00	0.00
ATOM 805	HA	GLU A	57	156.074	-9.242	5.579	1.00	0.00
ATOM 806	1HB	GLU A	57	157.370	-11.760	6.641	1.00	0.00
ATOM 807	2HB	GLU A	57	158.206	-10.268	6.231	1.00	0.00
ATOM 808	1HG	GLU A	57	157.977	-9.732	8.374	1.00	0.00
ATOM 809	2HG	GLU A	57	156.284	-9.419	7.995	1.00	0.00
ATOM 810	N	CYS A	58	155.911	-10.214	3.224	1.00	0.00
ATOM 811	CA	CYS A	58	156.129	-10.631	1.844	1.00	0.00
ATOM 812	C	CYS A	58	157.505	-10.192	1.354	1.00	0.00
ATOM 813	O	CYS A	58	157.859	-9.016	1.437	1.00	0.00
ATOM 814	CB	CYS A	58	155.043	-10.051	0.935	1.00	0.00
ATOM 815	SG	CYS A	58	153.516	-11.020	0.901	1.00	0.00
ATOM 816	H	CYS A	58	155.341	-9.436	3.404	1.00	0.00
ATOM 817	HA	CYS A	58	156.076	-11.709	1.812	1.00	0.00
ATOM 818	1HB	CYS A	58	154.793	-9.057	1.275	1.00	0.00
ATOM 819	2HB	CYS A	58	155.420	-9.996	-0.075	1.00	0.00
ATOM 820	HG	CYS A	58	153.511	-11.593	1.672	1.00	0.00
ATOM 821	N	ALA A	59	158.278	-11.145	0.842	1.00	0.00
ATOM 822	CA	ALA A	59	159.615	-10.857	0.338	1.00	0.00
ATOM 823	C	ALA A	59	159.552	-10.057	-0.958	1.00	0.00
ATOM 824	O	ALA A	59	159.080	-10.551	-1.981	1.00	0.00



ATOM 825	CB	ALA A	59	160.388	-12.149	0.126	1.00	0.00
ATOM 826	H	ALA A	59	157.939	-12.064	0.802	1.00	0.00
ATOM 827	HA	ALA A	59	160.133	-10.274	1.085	1.00	0.00
ATOM 828	1HB	ALA A	59	159.764	-12.860	-0.395	1.00	0.00
ATOM 829	2HB	ALA A	59	160.677	-12.557	1.084	1.00	0.00
ATOM 830	3HB	ALA A	59	161.272	-11.948	-0.460	1.00	0.00
ATOM 831	N	GLY A	60	160.031	-8.818	-0.907	1.00	0.00
ATOM 832	CA	GLY A	60	160.020	-7.970	-2.084	1.00	0.00
ATOM 833	C	GLY A	60	159.553	-6.560	-1.778	1.00	0.00
ATOM 834	O	GLY A	60	159.945	-5.608	-2.455	1.00	0.00
ATOM 835	H	GLY A	60	160.396	-8.478	-0.063	1.00	0.00
ATOM 836	1HA	GLY A	60	161.020	-7.926	-2.491	1.00	0.00
ATOM 837	2HA	GLY A	60	159.362	-8.403	-2.821	1.00	0.00
ATOM 838	N	CYS A	61	158.713	-6.425	-0.757	1.00	0.00
ATOM 839	CA	CYS A	61	158.192	-5.122	-0.363	1.00	0.00
ATOM 840	C	CYS A	61	159.189	-4.380	0.519	1.00	0.00
ATOM 841	O	CYS A	61	160.222	-4.931	0.904	1.00	0.00
ATOM 842	CB	CYS A	61	156.861	-5.283	0.375	1.00	0.00
ATOM 843	SG	CYS A	61	155.608	-6.197	-0.553	1.00	0.00
ATOM 844	H	CYS A	61	158.438	-7.221	-0.257	1.00	0.00
ATOM 845	HA	CYS A	61	158.026	-4.545	-1.262	1.00	0.00
ATOM 846	1HB	CYS A	61	157.035	-5.812	1.301	1.00	0.00
ATOM 847	2HB	CYS A	61	156.460	-4.305	0.595	1.00	0.00
ATOM 848	HG	CYS A	61	154.811	-5.662	-0.582	1.00	0.00
ATOM 849	N	THR A	62	158.876	-3.128	0.835	1.00	0.00
ATOM 850	CA	THR A	62	159.746	-2.310	1.673	1.00	0.00
ATOM 851	C	THR A	62	159.171	-2.169	3.078	1.00	0.00
ATOM 852	O	THR A	62	158.132	-2.748	3.397	1.00	0.00
ATOM 853	CB	THR A	62	159.940	-0.929	1.047	1.00	0.00

ATOM 854	OG1	THR A	62	158.694	-0.283	0.860	1.00	0.00
ATOM 855	CG2	THR A	62	160.641	-0.973	-0.294	1.00	0.00
ATOM 856	H	THR A	62	158.040	-2.744	0.498	1.00	0.00
ATOM 857	HA	THR A	62	160.704	-2.805	1.737	1.00	0.00
ATOM 858	HB	THR A	62	160.540	-0.325	1.712	1.00	0.00
ATOM 859	HG1	THR A	62	158.840	0.602	0.518	1.00	0.00
ATOM 860	1HG2	THR A	62	160.440	-1.919	-0.774	1.00	0.00
ATOM 861	2HG2	THR A	62	161.705	-0.862	-0.148	1.00	0.00
ATOM 862	3HG2	THR A	62	160.277	-0.169	-0.917	1.00	0.00
ATOM 863	N	ASP A	63	159.853	-1.394	3.916	1.00	0.00
ATOM 864	CA	ASP A	63	159.410	-1.175	5.289	1.00	0.00
ATOM 865	C	ASP A	63	158.661	0.148	5.414	1.00	0.00
ATOM 866	O	ASP A	63	158.703	0.800	6.457	1.00	0.00
ATOM 867	CB	ASP A	63	160.606	-1.189	6.241	1.00	0.00
ATOM 868	CG	ASP A	63	161.704	-0.240	5.805	1.00	0.00
ATOM 869	OD1	ASP A	63	161.752	0.893	6.328	1.00	0.00
ATOM 870	OD2	ASP A	63	162.517	-0.629	4.939	1.00	0.00
ATOM 871	H	ASP A	63	160.674	-0.958	3.604	1.00	0.00
ATOM 872	HA	ASP A	63	158.741	-1.980	5.553	1.00	0.00
ATOM 873	1HB	ASP A	63	160.276	-0.899	7.227	1.00	0.00
ATOM 874	2HB	ASP A	63	161.013	-2.189	6.282	1.00	0.00
ATOM 875	N	GLY A	64	157.976	0.538	4.344	1.00	0.00
ATOM 876	CA	GLY A	64	157.227	1.781	4.356	1.00	0.00
ATOM 877	C	GLY A	64	157.980	2.918	3.692	1.00	0.00
ATOM 878	O	GLY A	64	158.006	4.037	4.204	1.00	0.00
ATOM 879	H	GLY A	64	157.978	-0.022	3.540	1.00	0.00
ATOM 880	1HA	GLY A	64	156.292	1.631	3.836	1.00	0.00
ATOM 881	2HA	GLY A	64	157.018	2.053	5.380	1.00	0.00
ATOM 882	N	THR A	65	158.594	2.630	2.549	1.00	0.00

ATOM 883	CA	THR A	65	159.351	3.636	1.814	1.00	0.00
ATOM 884	C	THR A	65	159.077	3.536	0.317	1.00	0.00
ATOM 885	O	THR A	65	159.346	2.511	-0.307	1.00	0.00
ATOM 886	CB	THR A	65	160.848	3.475	2.081	1.00	0.00
ATOM 887	OG1	THR A	65	161.266	2.148	1.810	1.00	0.00
ATOM 888	CG2	THR A	65	161.239	3.795	3.508	1.00	0.00
ATOM 889	H	THR A	65	158.536	1.720	2.192	1.00	0.00
ATOM 890	HA	THR A	65	159.035	4.608	2.162	1.00	0.00
ATOM 891	HB	THR A	65	161.394	4.143	1.431	1.00	0.00
ATOM 892	HG1	THR A	65	161.056	1.927	0.900	1.00	0.00
ATOM 893	1HG2	THR A	65	160.578	4.555	3.900	1.00	0.00
ATOM 894	2HG2	THR A	65	162.256	4.158	3.530	1.00	0.00
ATOM 895	3HG2	THR A	65	161.162	2.904	4.112	1.00	0.00
ATOM 896	N	PHE A	66	158.540	4.610	-0.254	1.00	0.00
ATOM 897	CA	PHE A	66	158.230	4.645	-1.678	1.00	0.00
ATOM 898	C	PHE A	66	159.285	5.435	-2.446	1.00	0.00
ATOM 899	O	PHE A	66	159.348	6.660	-2.351	1.00	0.00
ATOM 900	CB	PHE A	66	156.848	5.261	-1.905	1.00	0.00
ATOM 901	CG	PHE A	66	156.258	4.935	-3.248	1.00	0.00
ATOM 902	CD1	PHE A	66	155.882	5.945	-4.118	1.00	0.00
ATOM 903	CD2	PHE A	66	156.081	3.618	-3.638	1.00	0.00
ATOM 904	CE1	PHE A	66	155.340	5.647	-5.354	1.00	0.00
ATOM 905	CE2	PHE A	66	155.538	3.314	-4.873	1.00	0.00
ATOM 906	CZ	PHE A	66	155.167	4.330	-5.732	1.00	0.00
ATOM 907	H	PHE A	66	158.348	5.398	0.296	1.00	0.00
ATOM 908	HA	PHE A	66	158.224	3.628	-2.040	1.00	0.00
ATOM 909	1HB	PHE A	66	156.171	4.898	-1.148	1.00	0.00
ATOM 910	2HB	PHE A	66	156.925	6.337	-1.827	1.00	0.00
ATOM 911	HD1	PHE A	66	156.018	6.976	-3.824	1.00	0.00

ATOM 912	HD2	PHE A	66	156.370	2.822	-2.968	1.00	0.00
ATOM 913	HE1	PHE A	66	155.051	6.445	-6.023	1.00	0.00
ATOM 914	HE2	PHE A	66	155.404	2.283	-5.166	1.00	0.00
ATOM 915	HZ	PHE A	66	154.743	4.096	-6.696	1.00	0.00
ATOM 916	N	ARG A	67	160.111	4.724	-3.207	1.00	0.00
ATOM 917	CA	ARG A	67	161.164	5.358	-3.991	1.00	0.00
ATOM 918	C	ARG A	67	162.128	6.124	-3.090	1.00	0.00
ATOM 919	O	ARG A	67	162.576	7.219	-3.430	1.00	0.00
ATOM 920	CB	ARG A	67	160.557	6.304	-5.029	1.00	0.00
ATOM 921	CG	ARG A	67	159.739	5.593	-6.096	1.00	0.00
ATOM 922	CD	ARG A	67	160.131	6.041	-7.495	1.00	0.00
ATOM 923	NE	ARG A	67	161.016	5.080	-8.150	1.00	0.00
ATOM 924	CZ	ARG A	67	161.773	5.370	-9.206	1.00	0.00
ATOM 925	NH1	ARG A	67	161.755	6.590	-9.731	1.00	0.00
ATOM 926	NH2	ARG A	67	162.549	4.437	-9.741	1.00	0.00
ATOM 927	H	ARG A	67	160.011	3.750	-3.241	1.00	0.00
ATOM 928	HA	ARG A	67	161.711	4.580	-4.503	1.00	0.00
ATOM 929	1HB	ARG A	67	159.912	7.008	-4.523	1.00	0.00
ATOM 930	2HB	ARG A	67	161.353	6.846	-5.516	1.00	0.00
ATOM 931	1HG	ARG A	67	159.904	4.529	-6.012	1.00	0.00
ATOM 932	2HG	ARG A	67	158.693	5.810	-5.938	1.00	0.00
ATOM 933	1HD	ARG A	67	159.236	6.154	-8.088	1.00	0.00
ATOM 934	2HD	ARG A	67	160.638	6.994	-7.425	1.00	0.00
ATOM 935	HE	ARG A	67	161.048	4.172	-7.783	1.00	0.00
ATOM 936	1HH1	ARG A	67	161.172	7.297	-9.333	1.00	0.00
ATOM 937	2HH1	ARG A	67	162.325	6.801	-10.524	1.00	0.00
ATOM 938	1HH2	ARG A	67	162.566	3.516	-9.351	1.00	0.00
ATOM 939	2HH2	ARG A	67	163.117	4.653	-10.535	1.00	0.00
ATOM 940	N	GLY A	68	162.443	5.540	-1.939	1.00	0.00

ATOM 941	CA	GLY A	68	163.351	6.182	-1.006	1.00	0.00
ATOM 942	C	GLY A	68	162.706	7.342	-0.275	1.00	0.00
ATOM 943	O	GLY A	68	163.385	8.287	0.127	1.00	0.00
ATOM 944	H	GLY A	68	162.055	4.667	-1.721	1.00	0.00
ATOM 945	1HA	GLY A	68	163.679	5.452	-0.281	1.00	0.00
ATOM 946	2HA	GLY A	68	164.210	6.546	-1.550	1.00	0.00
ATOM 947	N	THR A	69	161.389	7.272	-0.102	1.00	0.00
ATOM 948	CA	THR A	69	160.651	8.325	0.585	1.00	0.00
ATOM 949	C	THR A	69	159.735	7.739	1.654	1.00	0.00
ATOM 950	O	THR A	69	158.604	7.347	1.369	1.00	0.00
ATOM 951	CB	THR A	69	159.829	9.137	-0.417	1.00	0.00
ATOM 952	OG1	THR A	69	160.590	9.421	-1.578	1.00	0.00
ATOM 953	CG2	THR A	69	159.336	10.454	0.141	1.00	0.00
ATOM 954	H	THR A	69	160.902	6.493	-0.445	1.00	0.00
ATOM 955	HA	THR A	69	161.368	8.976	1.061	1.00	0.00
ATOM 956	HB	THR A	69	158.965	8.558	-0.711	1.00	0.00
ATOM 957	HG1	THR A	69	161.292	10.038	-1.358	1.00	0.00
ATOM 958	1HG2	THR A	69	159.985	11.252	-0.190	1.00	0.00
ATOM 959	2HG2	THR A	69	159.340	10.412	1.220	1.00	0.00
ATOM 960	3HG2	THR A	69	158.331	10.639	-0.208	1.00	0.00
ATOM 961	N	ARG A	70	160.232	7.682	2.886	1.00	0.00
ATOM 962	CA	ARG A	70	159.457	7.143	3.998	1.00	0.00
ATOM 963	C	ARG A	70	158.310	8.077	4.365	1.00	0.00
ATOM 964	O	ARG A	70	158.529	9.234	4.725	1.00	0.00
ATOM 965	CB	ARG A	70	160.359	6.919	5.213	1.00	0.00
ATOM 966	CG	ARG A	70	159.662	6.210	6.364	1.00	0.00
ATOM 967	CD	ARG A	70	159.925	6.903	7.691	1.00	0.00
ATOM 968	NE	ARG A	70	159.851	5.977	8.819	1.00	0.00
ATOM 969	CZ	ARG A	70	160.254	6.275	10.051	1.00	0.00

ATOM 970	NH1	ARG A	70	160.761	7.472	10.320	1.00	0.00
ATOM 971	NH2	ARG A	70	160.151	5.374	11.018	1.00	0.00
ATOM 972	H	ARG A	70	161.141	8.009	3.050	1.00	0.00
ATOM 973	HA	ARG A	70	159.048	6.193	3.686	1.00	0.00
ATOM 974	1HB	ARG A	70	161.208	6.324	4.913	1.00	0.00
ATOM 975	2HB	ARG A	70	160.709	7.878	5.567	1.00	0.00
ATOM 976	1HG	ARG A	70	158.599	6.203	6.178	1.00	0.00
ATOM 977	2HG	ARG A	70	160.026	5.194	6.421	1.00	0.00
ATOM 978	1HD	ARG A	70	160.912	7.343	7.663	1.00	0.00
ATOM 979	2HD	ARG A	70	159.189	7.682	7.827	1.00	0.00
ATOM 980	HE	ARG A	70	159.482	5.085	8.647	1.00	0.00
ATOM 981	1HH1	ARG A	70	160.841	8.157	9.595	1.00	0.00
ATOM 982	2HH1	ARG A	70	161.062	7.690	11.248	1.00	0.00
ATOM 983	1HH2	ARG A	70	159.771	4.470	10.820	1.00	0.00
ATOM 984	2HH2	ARG A	70	160.454	5.598	11.945	1.00	0.00
ATOM 985	N	TYR A	71	157.086	7.567	4.275	1.00	0.00
ATOM 986	CA	TYR A	71	155.903	8.356	4.599	1.00	0.00
ATOM 987	C	TYR A	71	155.381	8.004	5.988	1.00	0.00
ATOM 988	O	TYR A	71	154.877	8.865	6.710	1.00	0.00
ATOM 989	CB	TYR A	71	154.808	8.125	3.556	1.00	0.00
ATOM 990	CG	TYR A	71	155.153	8.667	2.187	1.00	0.00
ATOM 991	CD1	TYR A	71	155.218	7.826	1.083	1.00	0.00
ATOM 992	CD2	TYR A	71	155.413	10.018	1.998	1.00	0.00
ATOM 993	CE1	TYR A	71	155.533	8.316	-0.170	1.00	0.00
ATOM 994	CE2	TYR A	71	155.727	10.517	0.748	1.00	0.00
ATOM 995	CZ	TYR A	71	155.786	9.662	-0.332	1.00	0.00
ATOM 996	OH	TYR A	71	156.099	10.155	-1.578	1.00	0.00
ATOM 997	H	TYR A	71	156.976	6.638	3.983	1.00	0.00
ATOM 998	HA	TYR A	71	156.187	9.397	4.587	1.00	0.00

ATOM 999	IHB	TYR A	71	154.633	7.064	3.458	1.00	0.00
ATOM 1000	ZHB	TYR A	71	153.901	8.607	3.886	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.019	6.773	1.213	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.367	10.685	2.846	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.578	7.646	-1.016	1.00	0.00
ATOM 1004	HE2	TYR A	71	155.926	11.571	0.622	1.00	0.00
ATOM 1005	HH	TYR A	71	155.373	9.983	-2.182	1.00	0.00
ATOM 1006	N	PHE A	72	155.504	6.733	6.357	1.00	0.00
ATOM 1007	CA	PHE A	72	155.045	6.266	7.659	1.00	0.00
ATOM 1008	C	PHE A	72	156.020	5.251	8.248	1.00	0.00
ATOM 1009	O	PHE A	72	157.052	4.949	7.649	1.00	0.00
ATOM 1010	CB	PHE A	72	153.653	5.642	7.538	1.00	0.00
ATOM 1011	CG	PHE A	72	153.543	4.631	6.433	1.00	0.00
ATOM 1012	CD1	PHE A	72	153.294	5.033	5.130	1.00	0.00
ATOM 1013	CD2	PHE A	72	153.689	3.278	6.696	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.193	4.104	4.111	1.00	0.00
ATOM 1015	CE2	PHE A	72	153.588	2.345	5.682	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.340	2.759	4.388	1.00	0.00
ATOM 1017	H	PHE A	72	155.914	6.094	5.737	1.00	0.00
ATOM 1018	HA	PHE A	72	154.990	7.120	8.317	1.00	0.00
ATOM 1019	IHB	PHE A	72	153.406	5.147	8.465	1.00	0.00
ATOM 1020	ZHB	PHE A	72	152.931	6.422	7.349	1.00	0.00
ATOM 1021	HD1	PHE A	72	153.179	6.084	4.913	1.00	0.00
ATOM 1022	HD2	PHE A	72	153.884	2.954	7.708	1.00	0.00
ATOM 1023	HE1	PHE A	72	152.997	4.431	3.101	1.00	0.00
ATOM 1024	HE2	PHE A	72	153.705	1.294	5.901	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.262	2.032	3.593	1.00	0.00
ATOM 1026	N	THR A	73	155.687	4.731	9.424	1.00	0.00
ATOM 1027	CA	THR A	73	156.534	3.750	10.094	1.00	0.00

ATOM 1028	C	THR A	73	155.833	2.399	10.188	1.00	0.00
ATOM 1029	O	THR A	73	154.813	2.263	10.862	1.00	0.00
ATOM 1030	CB	THR A	73	156.909	4.241	11.493	1.00	0.00
ATOM 1031	OG1	THR A	73	157.700	3.278	12.167	1.00	0.00
ATOM 1032	CG2	THR A	73	155.709	4.539	12.365	1.00	0.00
ATOM 1033	H	THR A	73	154.851	5.012	9.852	1.00	0.00
ATOM 1034	HA	THR A	73	157.434	3.636	9.510	1.00	0.00
ATOM 1035	HB	THR A	73	157.486	5.150	11.401	1.00	0.00
ATOM 1036	HG1	THR A	73	158.049	3.660	12.976	1.00	0.00
ATOM 1037	1HG2	THR A	73	155.202	3.617	12.608	1.00	0.00
ATOM 1038	2HG2	THR A	73	155.032	5.192	11.834	1.00	0.00
ATOM 1039	3HG2	THR A	73	156.035	5.021	13.274	1.00	0.00
ATOM 1040	N	CYS A	74	156.388	1.402	9.505	1.00	0.00
ATOM 1041	CA	CYS A	74	155.816	0.060	9.512	1.00	0.00
ATOM 1042	C	CYS A	74	156.913	-0.999	9.554	1.00	0.00
ATOM 1043	O	CYS A	74	158.096	-0.687	9.422	1.00	0.00
ATOM 1044	CB	CYS A	74	154.939	-0.148	8.276	1.00	0.00
ATOM 1045	SG	CYS A	74	153.237	0.427	8.475	1.00	0.00
ATOM 1046	H	CYS A	74	157.201	1.572	8.985	1.00	0.00
ATOM 1047	HA	CYS A	74	155.205	-0.035	10.396	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.370	0.387	7.443	1.00	0.00
ATOM 1049	2HB	CYS A	74	154.905	-1.202	8.042	1.00	0.00
ATOM 1050	HG	CYS A	74	152.753	0.204	7.676	1.00	0.00
ATOM 1051	N	ALA A	75	156.512	-2.252	9.739	1.00	0.00
ATOM 1052	CA	ALA A	75	157.461	-3.357	9.799	1.00	0.00
ATOM 1053	C	ALA A	75	158.197	-3.521	8.474	1.00	0.00
ATOM 1054	O	ALA A	75	157.960	-2.774	7.524	1.00	0.00
ATOM 1055	CB	ALA A	75	156.745	-4.647	10.170	1.00	0.00
ATOM 1056	H	ALA A	75	155.554	-2.438	9.837	1.00	0.00



ATOM 1057	HA	ALA A	75	158.180	-3.137	10.574	1.00	0.00
ATOM 1058	1HB	ALA A	75	156.801	-4.796	11.238	1.00	0.00
ATOM 1059	2HB	ALA A	75	157.215	-5.478	9.665	1.00	0.00
ATOM 1060	3HB	ALA A	75	155.709	-4.583	9.869	1.00	0.00
ATOM 1061	N	LEU A	76	159.091	-4.502	8.416	1.00	0.00
ATOM 1062	CA	LEU A	76	159.862	-4.764	7.206	1.00	0.00
ATOM 1063	C	LEU A	76	159.161	-5.793	6.326	1.00	0.00
ATOM 1064	O	LEU A	76	158.560	-6.745	6.825	1.00	0.00
ATOM 1065	CB	LEU A	76	161.265	-5.256	7.566	1.00	0.00
ATOM 1066	CG	LEU A	76	162.272	-4.153	7.899	1.00	0.00
ATOM 1067	CD1	LEU A	76	163.265	-4.636	8.945	1.00	0.00
ATOM 1068	CD2	LEU A	76	162.999	-3.700	6.642	1.00	0.00
ATOM 1069	H	LEU A	76	159.236	-5.064	9.206	1.00	0.00
ATOM 1070	HA	LEU A	76	159.945	-3.836	6.659	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.185	-5.912	8.421	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.650	-5.823	6.733	1.00	0.00
ATOM 1073	HG	LEU A	76	161.745	-3.304	8.307	1.00	0.00
ATOM 1074	1HD1	LEU A	76	164.124	-5.069	8.454	1.00	0.00
ATOM 1075	2HD1	LEU A	76	162.795	-5.380	9.572	1.00	0.00
ATOM 1076	3HD1	LEU A	76	163.582	-3.801	9.554	1.00	0.00
ATOM 1077	1HD2	LEU A	76	162.395	-3.926	5.775	1.00	0.00
ATOM 1078	2HD2	LEU A	76	163.945	-4.216	6.567	1.00	0.00
ATOM 1079	3HD2	LEU A	76	163.173	-2.636	6.690	1.00	0.00
ATOM 1080	N	LYS A	77	159.241	-5.595	5.014	1.00	0.00
ATOM 1081	CA	LYS A	77	158.615	-6.506	4.063	1.00	0.00
ATOM 1082	C	LYS A	77	157.102	-6.545	4.261	1.00	0.00
ATOM 1083	O	LYS A	77	156.473	-7.591	4.107	1.00	0.00
ATOM 1084	CB	LYS A	77	159.196	-7.914	4.213	1.00	0.00
ATOM 1085	CG	LYS A	77	160.695	-7.980	3.971	1.00	0.00

ATOM 1086	CD	LYS A	77	161.038	-7.712	2.515	1.00	0.00
ATOM 1087	CE	LYS A	77	162.514	-7.398	2.339	1.00	0.00
ATOM 1088	NZ	LYS A	77	163.360	-8.619	2.449	1.00	0.00
ATOM 1089	H	LYS A	77	159.734	-4.817	4.677	1.00	0.00
ATOM 1090	HA	LYS A	77	158.826	-6.143	3.069	1.00	0.00
ATOM 1091	1HB	LYS A	77	158.998	-8.268	5.213	1.00	0.00
ATOM 1092	2HB	LYS A	77	158.709	-8.569	3.505	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.183	-7.239	4.587	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.050	-8.965	4.240	1.00	0.00
ATOM 1095	1HD	LYS A	77	160.794	-8.586	1.931	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.456	-6.871	2.167	1.00	0.00
ATOM 1097	1HE	LYS A	77	162.662	-6.956	1.364	1.00	0.00
ATOM 1098	2HE	LYS A	77	162.813	-6.693	3.101	1.00	0.00
ATOM 1099	1HZ	LYS A	77	162.813	-9.459	2.167	1.00	0.00
ATOM 1100	2HZ	LYS A	77	163.682	-8.743	3.430	1.00	0.00
ATOM 1101	3HZ	LYS A	77	164.191	-8.536	1.831	1.00	0.00
ATOM 1102	N	LYS A	78	156.526	-5.398	4.602	1.00	0.00
ATOM 1103	CA	LYS A	78	155.087	-5.300	4.821	1.00	0.00
ATOM 1104	C	LYS A	78	154.565	-3.928	4.407	1.00	0.00
ATOM 1105	O	LYS A	78	153.672	-3.373	5.047	1.00	0.00
ATOM 1106	CB	LYS A	78	154.754	-5.564	6.291	1.00	0.00
ATOM 1107	CG	LYS A	78	155.276	-6.897	6.803	1.00	0.00
ATOM 1108	CD	LYS A	78	155.037	-7.051	8.296	1.00	0.00
ATOM 1109	CE	LYS A	78	153.738	-7.786	8.580	1.00	0.00
ATOM 1110	NZ	LYS A	78	153.489	-7.930	10.040	1.00	0.00
ATOM 1111	H	LYS A	78	157.081	-4.597	4.709	1.00	0.00
ATOM 1112	HA	LYS A	78	154.609	-6.053	4.212	1.00	0.00
ATOM 1113	1HB	LYS A	78	155.187	-4.778	6.892	1.00	0.00
ATOM 1114	2HB	LYS A	78	153.682	-5.551	6.413	1.00	0.00

ATOM 1115	1HG	LYS A	78	154.768	-7.695	6.283	1.00	0.00
ATOM 1116	2HG	LYS A	78	156.337	-6.956	6.609	1.00	0.00
ATOM 1117	1HD	LYS A	78	155.857	-7.608	8.726	1.00	0.00
ATOM 1118	2HD	LYS A	78	154.992	-6.070	8.746	1.00	0.00
ATOM 1119	1HE	LYS A	78	152.923	-7.233	8.138	1.00	0.00
ATOM 1120	2HE	LYS A	78	153.790	-8.768	8.132	1.00	0.00
ATOM 1121	1HZ	LYS A	78	152.472	-7.847	10.240	1.00	0.00
ATOM 1122	2HZ	LYS A	78	153.995	-7.189	10.566	1.00	0.00
ATOM 1123	3HZ	LYS A	78	153.820	-8.860	10.369	1.00	0.00
ATOM 1124	N	ALA A	79	155.130	-3.385	3.333	1.00	0.00
ATOM 1125	CA	ALA A	79	154.722	-2.078	2.834	1.00	0.00
ATOM 1126	C	ALA A	79	154.661	-2.066	1.311	1.00	0.00
ATOM 1127	O	ALA A	79	155.692	-2.045	0.638	1.00	0.00
ATOM 1128	CB	ALA A	79	155.673	-1.002	3.334	1.00	0.00
ATOM 1129	H	ALA A	79	155.838	-3.876	2.865	1.00	0.00
ATOM 1130	HA	ALA A	79	153.737	-1.864	3.225	1.00	0.00
ATOM 1131	1HB	ALA A	79	156.179	-1.352	4.222	1.00	0.00
ATOM 1132	2HB	ALA A	79	155.115	-0.107	3.567	1.00	0.00
ATOM 1133	3HB	ALA A	79	156.402	-0.782	2.568	1.00	0.00
ATOM 1134	N	LEU A	80	153.445	-2.077	0.772	1.00	0.00
ATOM 1135	CA	LEU A	80	153.250	-2.068	-0.674	1.00	0.00
ATOM 1136	C	LEU A	80	152.372	-0.893	-1.095	1.00	0.00
ATOM 1137	O	LEU A	80	151.191	-0.835	-0.752	1.00	0.00
ATOM 1138	CB	LEU A	80	152.617	-3.383	-1.131	1.00	0.00
ATOM 1139	CG	LEU A	80	152.301	-3.464	-2.626	1.00	0.00
ATOM 1140	CD1	LEU A	80	153.582	-3.431	-3.445	1.00	0.00
ATOM 1141	CD2	LEU A	80	151.501	-4.721	-2.933	1.00	0.00
ATOM 1142	H	LEU A	80	152.662	-2.093	1.360	1.00	0.00
ATOM 1143	HA	LEU A	80	154.218	-1.962	-1.139	1.00	0.00

ATOM 1144	1HB	LEU A	80	153.294	-4.189	-0.883	1.00	0.00
ATOM 1145	2HB	LEU A	80	151.698	-3.526	-0.585	1.00	0.00
ATOM 1146	HG	LEU A	80	151.704	-2.608	-2.907	1.00	0.00
ATOM 1147	1HD1	LEU A	80	153.460	-4.038	-4.330	1.00	0.00
ATOM 1148	2HD1	LEU A	80	154.399	-3.819	-2.852	1.00	0.00
ATOM 1149	3HD1	LEU A	80	153.799	-2.413	-3.734	1.00	0.00
ATOM 1150	1HD2	LEU A	80	151.751	-5.074	-3.924	1.00	0.00
ATOM 1151	2HD2	LEU A	80	150.446	-4.496	-2.887	1.00	0.00
ATOM 1152	3HD2	LEU A	80	151.739	-5.485	-2.209	1.00	0.00
ATOM 1153	N	PHE A	81	152.956	0.039	-1.839	1.00	0.00
ATOM 1154	CA	PHE A	81	152.227	1.212	-2.307	1.00	0.00
ATOM 1155	C	PHE A	81	151.468	0.904	-3.594	1.00	0.00
ATOM 1156	O	PHE A	81	151.964	0.183	-4.460	1.00	0.00
ATOM 1157	CB	PHE A	81	153.188	2.379	-2.536	1.00	0.00
ATOM 1158	CG	PHE A	81	153.792	2.916	-1.270	1.00	0.00
ATOM 1159	CD1	PHE A	81	154.989	2.410	-0.788	1.00	0.00
ATOM 1160	CD2	PHE A	81	153.164	3.928	-0.561	1.00	0.00
ATOM 1161	CE1	PHE A	81	155.547	2.902	0.377	1.00	0.00
ATOM 1162	CE2	PHE A	81	153.717	4.425	0.603	1.00	0.00
ATOM 1163	CZ	PHE A	81	154.910	3.911	1.073	1.00	0.00
ATOM 1164	H	PHE A	81	153.900	-0.064	-2.079	1.00	0.00
ATOM 1165	HA	PHE A	81	151.516	1.487	-1.543	1.00	0.00
ATOM 1166	1HB	PHE A	81	153.995	2.052	-3.175	1.00	0.00
ATOM 1167	2HB	PHE A	81	152.657	3.185	-3.020	1.00	0.00
ATOM 1168	HD1	PHE A	81	155.488	1.622	-1.332	1.00	0.00
ATOM 1169	HD2	PHE A	81	152.231	4.330	-0.928	1.00	0.00
ATOM 1170	HE1	PHE A	81	156.480	2.499	0.742	1.00	0.00
ATOM 1171	HE2	PHE A	81	153.216	5.213	1.146	1.00	0.00
ATOM 1172	HZ	PHE A	81	155.344	4.297	1.983	1.00	0.00

ATOM 1173	N	VAL A	82	150.265	1.454	-3.713	1.00	0.00
ATOM 1174	CA	VAL A	82	149.439	1.238	-4.894	1.00	0.00
ATOM 1175	C	VAL A	82	148.475	2.400	-5.112	1.00	0.00
ATOM 1176	O	VAL A	82	148.288	3.238	-4.230	1.00	0.00
ATOM 1177	CB	VAL A	82	148.632	-0.069	-4.784	1.00	0.00
ATOM 1178	CG1	VAL A	82	149.555	-1.276	-4.862	1.00	0.00
ATOM 1179	CG2	VAL A	82	147.821	-0.090	-3.498	1.00	0.00
ATOM 1180	H	VAL A	82	149.925	2.020	-2.988	1.00	0.00
ATOM 1181	HA	VAL A	82	150.095	1.161	-5.750	1.00	0.00
ATOM 1182	HB	VAL A	82	147.946	-0.116	-5.618	1.00	0.00
ATOM 1183	1HG1	VAL A	82	150.262	-1.240	-4.048	1.00	0.00
ATOM 1184	2HG1	VAL A	82	150.086	-1.262	-5.802	1.00	0.00
ATOM 1185	3HG1	VAL A	82	148.970	-2.181	-4.792	1.00	0.00
ATOM 1186	1HG2	VAL A	82	147.469	0.907	-3.279	1.00	0.00
ATOM 1187	2HG2	VAL A	82	148.442	-0.439	-2.686	1.00	0.00
ATOM 1188	3HG2	VAL A	82	146.976	-0.752	-3.616	1.00	0.00
ATOM 1189	N	LYS A	83	147.867	2.443	-6.292	1.00	0.00
ATOM 1190	CA	LYS A	83	146.922	3.502	-6.627	1.00	0.00
ATOM 1191	C	LYS A	83	145.691	3.437	-5.732	1.00	0.00
ATOM 1192	O	LYS A	83	145.092	2.376	-5.556	1.00	0.00
ATOM 1193	CB	LYS A	83	146.505	3.398	-8.096	1.00	0.00
ATOM 1194	CG	LYS A	83	147.637	3.674	-9.071	1.00	0.00
ATOM 1195	CD	LYS A	83	147.323	3.133	-10.456	1.00	0.00
ATOM 1196	CE	LYS A	83	148.071	3.897	-11.536	1.00	0.00
ATOM 1197	NZ	LYS A	83	149.309	3.187	-11.962	1.00	0.00
ATOM 1198	H	LYS A	83	148.058	1.747	-6.955	1.00	0.00
ATOM 1199	HA	LYS A	83	147.415	4.449	-6.470	1.00	0.00
ATOM 1200	1HB	LYS A	83	146.134	2.401	-8.281	1.00	0.00
ATOM 1201	2HB	LYS A	83	145.714	4.108	-8.285	1.00	0.00

ATOM 1202	1HG	LYS A	83	147.789	4.740	-9.138	1.00	0.00
ATOM 1203	2HG	LYS A	83	148.538	3.203	-8.705	1.00	0.00
ATOM 1204	1HD	LYS A	83	147.611	2.093	-10.500	1.00	0.00
ATOM 1205	2HD	LYS A	83	146.261	3.221	-10.634	1.00	0.00
ATOM 1206	1HE	LYS A	83	147.422	4.015	-12.391	1.00	0.00
ATOM 1207	2HE	LYS A	83	148.339	4.871	-11.150	1.00	0.00
ATOM 1208	1HZ	LYS A	83	149.120	2.620	-12.814	1.00	0.00
ATOM 1209	2HZ	LYS A	83	149.638	2.556	-11.205	1.00	0.00
ATOM 1210	3HZ	LYS A	83	150.060	3.875	-12.176	1.00	0.00
ATOM 1211	N	LEU A	84	145.318	4.580	-5.169	1.00	0.00
ATOM 1212	CA	LEU A	84	144.158	4.661	-4.291	1.00	0.00
ATOM 1213	C	LEU A	84	142.865	4.491	-5.082	1.00	0.00
ATOM 1214	O	LEU A	84	141.879	3.961	-4.572	1.00	0.00
ATOM 1215	CB	LEU A	84	144.151	6.002	-3.554	1.00	0.00
ATOM 1216	CG	LEU A	84	142.910	6.266	-2.698	1.00	0.00
ATOM 1217	CD1	LEU A	84	142.912	5.375	-1.467	1.00	0.00
ATOM 1218	CD2	LEU A	84	142.843	7.733	-2.298	1.00	0.00
ATOM 1219	H	LEU A	84	145.837	5.392	-5.350	1.00	0.00
ATOM 1220	HA	LEU A	84	144.233	3.863	-3.568	1.00	0.00
ATOM 1221	1HB	LEU A	84	145.020	6.041	-2.914	1.00	0.00
ATOM 1222	2HB	LEU A	84	144.229	6.791	-4.287	1.00	0.00
ATOM 1223	HG	LEU A	84	142.027	6.036	-3.275	1.00	0.00
ATOM 1224	1HD1	LEU A	84	143.333	4.414	-1.719	1.00	0.00
ATOM 1225	2HD1	LEU A	84	141.899	5.244	-1.115	1.00	0.00
ATOM 1226	3HD1	LEU A	84	143.505	5.835	-0.689	1.00	0.00
ATOM 1227	1HD2	LEU A	84	142.606	8.332	-3.164	1.00	0.00
ATOM 1228	2HD2	LEU A	84	143.798	8.040	-1.898	1.00	0.00
ATOM 1229	3HD2	LEU A	84	142.078	7.866	-1.547	1.00	0.00
ATOM 1230	N	LYS A	85	142.879	4.942	-6.332	1.00	0.00

ATOM 1231	CA	LYS A	85	141.709	4.839	-7.195	1.00	0.00
ATOM 1232	C	LYS A	85	141.357	3.378	-7.464	1.00	0.00
ATOM 1233	O	LYS A	85	140.198	3.045	-7.713	1.00	0.00
ATOM 1234	CB	LYS A	85	141.956	5.567	-8.517	1.00	0.00
ATOM 1235	CG	LYS A	85	143.160	5.042	-9.284	1.00	0.00
ATOM 1236	CD	LYS A	85	144.320	6.026	-9.247	1.00	0.00
ATOM 1237	CE	LYS A	85	144.051	7.236	-10.128	1.00	0.00
ATOM 1238	NZ	LYS A	85	144.712	7.112	-11.457	1.00	0.00
ATOM 1239	H	LYS A	85	143.696	5.354	-6.683	1.00	0.00
ATOM 1240	HA	LYS A	85	140.880	5.308	-6.686	1.00	0.00
ATOM 1241	1HB	LYS A	85	141.083	5.459	-9.143	1.00	0.00
ATOM 1242	2HB	LYS A	85	142.114	6.616	-8.313	1.00	0.00
ATOM 1243	1HG	LYS A	85	143.479	4.111	-8.842	1.00	0.00
ATOM 1244	2HG	LYS A	85	142.875	4.876	-10.312	1.00	0.00
ATOM 1245	1HD	LYS A	85	144.464	6.360	-8.231	1.00	0.00
ATOM 1246	2HD	LYS A	85	145.212	5.528	-9.596	1.00	0.00
ATOM 1247	1HE	LYS A	85	142.985	7.331	-10.273	1.00	0.00
ATOM 1248	2HE	LYS A	85	144.426	8.119	-9.630	1.00	0.00
ATOM 1249	1HZ	LYS A	85	145.717	6.869	-11.335	1.00	0.00
ATOM 1250	2HZ	LYS A	85	144.645	8.011	-11.975	1.00	0.00
ATOM 1251	3HZ	LYS A	85	144.251	6.367	-12.017	1.00	0.00
ATOM 1252	N	SER A	86	142.363	2.511	-7.412	1.00	0.00
ATOM 1253	CA	SER A	86	142.158	1.087	-7.651	1.00	0.00
ATOM 1254	C	SER A	86	142.188	0.306	-6.341	1.00	0.00
ATOM 1255	O	SER A	86	142.608	-0.850	-6.306	1.00	0.00
ATOM 1256	CB	SER A	86	143.227	0.549	-8.603	1.00	0.00
ATOM 1257	OG	SER A	86	143.165	1.200	-9.861	1.00	0.00
ATOM 1258	H	SER A	86	143.265	2.837	-7.209	1.00	0.00
ATOM 1259	HA	SER A	86	141.187	0.965	-8.107	1.00	0.00

ATOM 1260	1HB	SER A	86	144.204	0.714	-8.176	1.00	0.00
ATOM 1261	2HB	SER A	86	143.073	-0.510	-8.752	1.00	0.00
ATOM 1262	HG	SER A	86	142.249	1.269	-10.141	1.00	0.00
ATOM 1263	N	CYS A	87	141.740	0.946	-5.266	1.00	0.00
ATOM 1264	CA	CYS A	87	141.714	0.312	-3.953	1.00	0.00
ATOM 1265	C	CYS A	87	140.288	-0.056	-3.555	1.00	0.00
ATOM 1266	O	CYS A	87	139.363	0.738	-3.721	1.00	0.00
ATOM 1267	CB	CYS A	87	142.326	1.241	-2.903	1.00	0.00
ATOM 1268	SG	CYS A	87	144.133	1.202	-2.848	1.00	0.00
ATOM 1269	H	CYS A	87	141.417	1.868	-5.358	1.00	0.00
ATOM 1270	HA	CYS A	87	142.303	-0.591	-4.011	1.00	0.00
ATOM 1271	1HB	CYS A	87	142.027	2.256	-3.113	1.00	0.00
ATOM 1272	2HB	CYS A	87	141.961	0.958	-1.927	1.00	0.00
ATOM 1273	HG	CYS A	87	144.438	0.603	-3.533	1.00	0.00
ATOM 1274	N	ARG A	88	140.119	-1.265	-3.030	1.00	0.00
ATOM 1275	CA	ARG A	88	138.806	-1.737	-2.610	1.00	0.00
ATOM 1276	C	ARG A	88	138.683	-1.722	-1.085	1.00	0.00
ATOM 1277	O	ARG A	88	139.522	-2.287	-0.385	1.00	0.00
ATOM 1278	CB	ARG A	88	138.558	-3.152	-3.140	1.00	0.00
ATOM 1279	CG	ARG A	88	137.514	-3.212	-4.244	1.00	0.00
ATOM 1280	CD	ARG A	88	136.107	-3.286	-3.675	1.00	0.00
ATOM 1281	NE	ARG A	88	135.160	-3.860	-4.628	1.00	0.00
ATOM 1282	CZ	ARG A	88	133.845	-3.915	-4.425	1.00	0.00
ATOM 1283	NH1	ARG A	88	133.319	-3.434	-3.305	1.00	0.00
ATOM 1284	NH2	ARG A	88	133.055	-4.454	-5.343	1.00	0.00
ATOM 1285	H	ARG A	88	140.895	-1.853	-2.924	1.00	0.00
ATOM 1286	HA	ARG A	88	138.067	-1.072	-3.029	1.00	0.00
ATOM 1287	1HB	ARG A	88	139.485	-3.544	-3.530	1.00	0.00
ATOM 1288	2HB	ARG A	88	138.226	-3.779	-2.326	1.00	0.00



ATOM 1289	1HG	ARG A	88	137.598	-2.327	-4.856	1.00	0.00
ATOM 1290	2HG	ARG A	88	137.695	-4.089	-4.849	1.00	0.00
ATOM 1291	1HD	ARG A	88	136.123	-3.898	-2.786	1.00	0.00
ATOM 1292	2HD	ARG A	88	135.784	-2.288	-3.417	1.00	0.00
ATOM 1293	HE	ARG A	88	135.522	-4.222	-5.463	1.00	0.00
ATOM 1294	1HH1	ARG A	88	133.909	-3.027	-2.609	1.00	0.00
ATOM 1295	2HH1	ARG A	88	132.330	-3.480	-3.158	1.00	0.00
ATOM 1296	1HH2	ARG A	88	133.446	-4.818	-6.189	1.00	0.00
ATOM 1297	2HH2	ARG A	88	132.067	-4.496	-5.191	1.00	0.00
ATOM 1298	N	PRO A	89	137.633	-1.072	-0.548	1.00	0.00
ATOM 1299	CA	PRO A	89	137.417	-0.994	0.901	1.00	0.00
ATOM 1300	C	PRO A	89	137.404	-2.369	1.559	1.00	0.00
ATOM 1301	O	PRO A	89	136.670	-3.264	1.136	1.00	0.00
ATOM 1302	CB	PRO A	89	136.041	-0.332	1.024	1.00	0.00
ATOM 1303	CG	PRO A	89	135.870	0.429	-0.245	1.00	0.00
ATOM 1304	CD	PRO A	89	136.580	-0.368	-1.303	1.00	0.00
ATOM 1305	HA	PRO A	89	138.161	-0.375	1.379	1.00	0.00
ATOM 1306	1HB	PRO A	89	135.282	-1.091	1.136	1.00	0.00
ATOM 1307	2HB	PRO A	89	136.031	0.326	1.881	1.00	0.00
ATOM 1308	1HG	PRO A	89	134.819	0.515	-0.482	1.00	0.00
ATOM 1309	2HG	PRO A	89	136.316	1.408	-0.150	1.00	0.00
ATOM 1310	1HD	PRO A	89	135.902	-1.070	-1.765	1.00	0.00
ATOM 1311	2HD	PRO A	89	137.011	0.289	-2.044	1.00	0.00
ATOM 1312	N	ASP A	90	138.220	-2.533	2.594	1.00	0.00
ATOM 1313	CA	ASP A	90	138.302	-3.801	3.309	1.00	0.00
ATOM 1314	C	ASP A	90	137.533	-3.735	4.624	1.00	0.00
ATOM 1315	O	ASP A	90	138.011	-3.166	5.606	1.00	0.00
ATOM 1316	CB	ASP A	90	139.763	-4.165	3.578	1.00	0.00
ATOM 1317	CG	ASP A	90	139.987	-5.664	3.624	1.00	0.00

ATOM 1318	OD1	ASP	A	90	140.017	-6.226	4.739	1.00	0.00
ATOM 1319	OD2	ASP	A	90	140.130	-6.275	2.544	1.00	0.00
ATOM 1320	H	ASP	A	90	138.781	-1.783	2.885	1.00	0.00
ATOM 1321	HA	ASP	A	90	137.860	-4.562	2.685	1.00	0.00
ATOM 1322	1HB	ASP	A	90	140.381	-3.751	2.796	1.00	0.00
ATOM 1323	2HB	ASP	A	90	140.063	-3.746	4.527	1.00	0.00
ATOM 1324	N	SER	A	91	136.339	-4.319	4.637	1.00	0.00
ATOM 1325	CA	SER	A	91	135.506	-4.326	5.834	1.00	0.00
ATOM 1326	C	SER	A	91	135.639	-5.649	6.582	1.00	0.00
ATOM 1327	O	SER	A	91	134.700	-6.099	7.237	1.00	0.00
ATOM 1328	CB	SER	A	91	134.042	-4.084	5.463	1.00	0.00
ATOM 1329	OG	SER	A	91	133.352	-3.424	6.510	1.00	0.00
ATOM 1330	H	SER	A	91	136.012	-4.757	3.824	1.00	0.00
ATOM 1331	HA	SER	A	91	135.842	-3.527	6.476	1.00	0.00
ATOM 1332	1HB	SER	A	91	133.994	-3.472	4.575	1.00	0.00
ATOM 1333	2HB	SER	A	91	133.560	-5.032	5.272	1.00	0.00
ATOM 1334	HG	SER	A	91	133.254	-4.021	7.255	1.00	0.00
ATOM 1335	N	ARG	A	92	136.812	-6.266	6.479	1.00	0.00
ATOM 1336	CA	ARG	A	92	137.067	-7.537	7.147	1.00	0.00
ATOM 1337	C	ARG	A	92	137.066	-7.367	8.663	1.00	0.00
ATOM 1338	O	ARG	A	92	136.736	-8.295	9.401	1.00	0.00
ATOM 1339	CB	ARG	A	92	138.406	-8.118	6.689	1.00	0.00
ATOM 1340	CG	ARG	A	92	138.307	-8.944	5.417	1.00	0.00
ATOM 1341	CD	ARG	A	92	137.309	-10.081	5.568	1.00	0.00
ATOM 1342	NE	ARG	A	92	136.010	-9.750	4.987	1.00	0.00
ATOM 1343	CZ	ARG	A	92	134.911	-10.481	5.164	1.00	0.00
ATOM 1344	NH1	ARG	A	92	134.949	-11.582	5.903	1.00	0.00
ATOM 1345	NH2	ARG	A	92	133.771	-10.109	4.598	1.00	0.00
ATOM 1346	H	ARG	A	92	137.522	-5.857	5.942	1.00	0.00

ATOM 1347	HA	ARG A	92	136.276	-8.219	6.873	1.00	0.00
ATOM 1348	1HB	ARG A	92	139.095	-7.305	6.511	1.00	0.00
ATOM 1349	2HB	ARG A	92	138.800	-8.748	7.472	1.00	0.00
ATOM 1350	1HG	ARG A	92	137.988	-8.305	4.607	1.00	0.00
ATOM 1351	2HG	ARG A	92	139.279	-9.357	5.191	1.00	0.00
ATOM 1352	1HD	ARG A	92	137.701	-10.956	5.072	1.00	0.00
ATOM 1353	2HD	ARG A	92	137.180	-10.293	6.619	1.00	0.00
ATOM 1354	HE	ARG A	92	135.953	-8.941	4.437	1.00	0.00
ATOM 1355	1HH1	ARG A	92	135.807	-11.868	6.332	1.00	0.00
ATOM 1356	2HH1	ARG A	92	134.121	-12.127	6.032	1.00	0.00
ATOM 1357	1HH2	ARG A	92	133.736	-9.280	4.040	1.00	0.00
ATOM 1358	2HH2	ARG A	92	132.945	-10.658	4.730	1.00	0.00
ATOM 1359	N	PHE A	93	137.439	-6.176	9.122	1.00	0.00
ATOM 1360	CA	PHE A	93	137.481	-5.887	10.550	1.00	0.00
ATOM 1361	C	PHE A	93	136.780	-4.569	10.863	1.00	0.00
ATOM 1362	O	PHE A	93	137.137	-3.875	11.815	1.00	0.00
ATOM 1363	CB	PHE A	93	138.930	-5.835	11.037	1.00	0.00
ATOM 1364	CG	PHE A	93	139.691	-7.106	10.797	1.00	0.00
ATOM 1365	CD1	PHE A	93	140.083	-7.907	11.858	1.00	0.00
ATOM 1366	CD2	PHE A	93	140.013	-7.503	9.508	1.00	0.00
ATOM 1367	CE1	PHE A	93	140.783	-9.078	11.639	1.00	0.00
ATOM 1368	CE2	PHE A	93	140.713	-8.673	9.283	1.00	0.00
ATOM 1369	CZ	PHE A	93	141.098	-9.462	10.350	1.00	0.00
ATOM 1370	H	PHE A	93	137.693	-5.476	8.484	1.00	0.00
ATOM 1371	HA	PHE A	93	136.968	-6.685	11.065	1.00	0.00
ATOM 1372	1HB	PHE A	93	139.446	-5.036	10.524	1.00	0.00
ATOM 1373	2HB	PHE A	93	138.938	-5.637	12.100	1.00	0.00
ATOM 1374	HD1	PHE A	93	139.836	-7.607	12.866	1.00	0.00
ATOM 1375	HD2	PHE A	93	139.713	-6.887	8.674	1.00	0.00

ATOM 1376	HE1	PHE A	93	141.083	-9.693	12.475	1.00	0.00
ATOM 1377	HE2	PHE A	93	140.959	-8.971	8.275	1.00	0.00
ATOM 1378	HZ	PHE A	93	141.645	-10.376	10.176	1.00	0.00
ATOM 1379	N	ALA A	94	135.778	-4.230	10.057	1.00	0.00
ATOM 1380	CA	ALA A	94	135.027	-2.996	10.252	1.00	0.00
ATOM 1381	C	ALA A	94	133.691	-3.270	10.933	1.00	0.00
ATOM 1382	O	ALA A	94	132.872	-4.038	10.431	1.00	0.00
ATOM 1383	CB	ALA A	94	134.809	-2.296	8.918	1.00	0.00
ATOM 1384	H	ALA A	94	135.538	-4.825	9.315	1.00	0.00
ATOM 1385	HA	ALA A	94	135.614	-2.345	10.882	1.00	0.00
ATOM 1386	1HB	ALA A	94	134.850	-3.021	8.120	1.00	0.00
ATOM 1387	2HB	ALA A	94	135.580	-1.554	8.772	1.00	0.00
ATOM 1388	3HB	ALA A	94	133.842	-1.815	8.918	1.00	0.00
ATOM 1389	N	SER A	95	133.478	-2.635	12.081	1.00	0.00
ATOM 1390	CA	SER A	95	132.240	-2.810	12.832	1.00	0.00
ATOM 1391	C	SER A	95	131.059	-2.200	12.085	1.00	0.00
ATOM 1392	O	SER A	95	131.135	-1.074	11.594	1.00	0.00
ATOM 1393	CB	SER A	95	132.365	-2.173	14.217	1.00	0.00
ATOM 1394	OG	SER A	95	131.405	-2.708	15.114	1.00	0.00
ATOM 1395	H	SER A	95	134.169	-2.034	12.431	1.00	0.00
ATOM 1396	HA	SER A	95	132.070	-3.870	12.947	1.00	0.00
ATOM 1397	1HB	SER A	95	133.352	-2.365	14.611	1.00	0.00
ATOM 1398	2HB	SER A	95	132.210	-1.108	14.137	1.00	0.00
ATOM 1399	HG	SER A	95	130.544	-2.721	14.690	1.00	0.00
ATOM 1400	N	LEU A	96	129.965	-2.952	12.003	1.00	0.00
ATOM 1401	CA	LEU A	96	128.767	-2.486	11.316	1.00	0.00
ATOM 1402	C	LEU A	96	127.508	-2.961	12.035	1.00	0.00
ATOM 1403	O	LEU A	96	127.307	-4.159	12.230	1.00	0.00
ATOM 1404	CB	LEU A	96	128.759	-2.981	9.868	1.00	0.00

ATOM 1405	CG	LEU A	96	129.541	-2.112	8.882	1.00	0.00
ATOM 1406	CD1	LEU A	96	129.667	-2.811	7.537	1.00	0.00
ATOM 1407	CD2	LEU A	96	128.869	-0.757	8.719	1.00	0.00
ATOM 1408	H	LEU A	96	129.965	-3.841	12.415	1.00	0.00
ATOM 1409	HA	LEU A	96	128.783	-1.407	11.317	1.00	0.00
ATOM 1410	1HB	LEU A	96	129.176	-3.978	9.849	1.00	0.00
ATOM 1411	2HB	LEU A	96	127.733	-3.033	9.534	1.00	0.00
ATOM 1412	HG	LEU A	96	130.537	-1.949	9.267	1.00	0.00
ATOM 1413	1HD1	LEU A	96	128.875	-2.478	6.882	1.00	0.00
ATOM 1414	2HD1	LEU A	96	129.590	-3.880	7.679	1.00	0.00
ATOM 1415	3HD1	LEU A	96	130.623	-2.574	7.096	1.00	0.00
ATOM 1416	1HD2	LEU A	96	128.830	-0.257	9.676	1.00	0.00
ATOM 1417	2HD2	LEU A	96	127.866	-0.895	8.344	1.00	0.00
ATOM 1418	3HD2	LEU A	96	129.435	-0.156	8.022	1.00	0.00
ATOM 1419	N	GLN A	97	126.665	-2.011	12.428	1.00	0.00
ATOM 1420	CA	GLN A	97	125.425	-2.332	13.127	1.00	0.00
ATOM 1421	C	GLN A	97	124.243	-2.354	12.156	1.00	0.00
ATOM 1422	O	GLN A	97	123.755	-1.304	11.739	1.00	0.00
ATOM 1423	CB	GLN A	97	125.167	-1.315	14.240	1.00	0.00
ATOM 1424	CG	GLN A	97	125.424	-1.863	15.634	1.00	0.00
ATOM 1425	CD	GLN A	97	124.146	-2.256	16.350	1.00	0.00
ATOM 1426	OE1	GLN A	97	123.962	-1.951	17.528	1.00	0.00
ATOM 1427	NE2	GLN A	97	123.255	-2.938	15.639	1.00	0.00
ATOM 1428	H	GLN A	97	126.881	-1.073	12.244	1.00	0.00
ATOM 1429	HA	GLN A	97	125.537	-3.311	13.565	1.00	0.00
ATOM 1430	1HB	GLN A	97	125.810	-0.461	14.089	1.00	0.00
ATOM 1431	2HB	GLN A	97	124.138	-0.993	14.187	1.00	0.00
ATOM 1432	1HG	GLN A	97	126.055	-2.735	15.554	1.00	0.00
ATOM 1433	2HG	GLN A	97	125.928	-1.107	16.218	1.00	0.00

ATOM 1434	1HE2	GLN	A	97	123.470	-3.146	14.705	1.00	0.00
ATOM 1435	2HE2	GLN	A	97	122.420	-3.205	16.076	1.00	0.00
ATOM 1436	N	PRO	A	98	123.766	-3.555	11.782	1.00	0.00
ATOM 1437	CA	PRO	A	98	122.638	-3.700	10.858	1.00	0.00
ATOM 1438	C	PRO	A	98	121.303	-3.372	11.518	1.00	0.00
ATOM 1439	O	PRO	A	98	121.041	-3.783	12.649	1.00	0.00
ATOM 1440	CB	PRO	A	98	122.694	-5.176	10.467	1.00	0.00
ATOM 1441	CG	PRO	A	98	123.315	-5.851	11.641	1.00	0.00
ATOM 1442	CD	PRO	A	98	124.286	-4.863	12.229	1.00	0.00
ATOM 1443	HA	PRO	A	98	122.765	-3.085	9.979	1.00	0.00
ATOM 1444	1HB	PRO	A	98	121.694	-5.541	10.282	1.00	0.00
ATOM 1445	2HB	PRO	A	98	123.298	-5.295	9.581	1.00	0.00
ATOM 1446	1HG	PRO	A	98	122.553	-6.103	12.364	1.00	0.00
ATOM 1447	2HG	PRO	A	98	123.834	-6.741	11.320	1.00	0.00
ATOM 1448	1HD	PRO	A	98	124.284	-4.928	13.307	1.00	0.00
ATOM 1449	2HD	PRO	A	98	125.279	-5.033	11.841	1.00	0.00
ATOM 1450	N	SER	A	99	120.462	-2.631	10.804	1.00	0.00
ATOM 1451	CA	SER	A	99	119.153	-2.249	11.322	1.00	0.00
ATOM 1452	C	SER	A	99	118.076	-3.219	10.847	1.00	0.00
ATOM 1453	O	SER	A	99	117.225	-3.649	11.627	1.00	0.00
ATOM 1454	CB	SER	A	99	118.803	-0.826	10.882	1.00	0.00
ATOM 1455	OG	SER	A	99	117.906	-0.216	11.794	1.00	0.00
ATOM 1456	H	SER	A	99	120.727	-2.335	9.909	1.00	0.00
ATOM 1457	HA	SER	A	99	119.200	-2.282	12.399	1.00	0.00
ATOM 1458	1HB	SER	A	99	119.705	-0.235	10.834	1.00	0.00
ATOM 1459	2HB	SER	A	99	118.341	-0.857	9.907	1.00	0.00
ATOM 1460	HG	SER	A	99	117.119	0.070	11.326	1.00	0.00
ATOM 1461	N	GLY	A	100	118.117	-3.561	9.563	1.00	0.00
ATOM 1462	CA	GLY	A	100	117.140	-4.477	9.006	1.00	0.00

ATOM 1463	C	GLY A 100	117.762	-5.478	8.050	1.00	0.00
ATOM 1464	O	GLY A 100	118.930	-5.840	8.200	1.00	0.00
ATOM 1465	H	GLY A 100	118.819	-3.187	8.988	1.00	0.00
ATOM 1466	1HA	GLY A 100	116.667	-5.015	9.815	1.00	0.00
ATOM 1467	2HA	GLY A 100	116.390	-3.909	8.478	1.00	0.00
ATOM 1468	N	PRO A 101	117.001	-5.947	7.047	1.00	0.00
ATOM 1469	CA	PRO A 101	117.498	-6.916	6.065	1.00	0.00
ATOM 1470	C	PRO A 101	118.546	-6.311	5.135	1.00	0.00
ATOM 1471	O	PRO A 101	119.493	-6.984	4.730	1.00	0.00
ATOM 1472	CB	PRO A 101	116.244	-7.303	5.277	1.00	0.00
ATOM 1473	CG	PRO A 101	115.329	-6.138	5.425	1.00	0.00
ATOM 1474	CD	PRO A 101	115.598	-5.570	6.791	1.00	0.00
ATOM 1475	HA	PRO A 101	117.909	-7.791	6.546	1.00	0.00
ATOM 1476	1HB	PRO A 101	116.503	-7.474	4.243	1.00	0.00
ATOM 1477	2HB	PRO A 101	115.813	-8.199	5.699	1.00	0.00
ATOM 1478	1HG	PRO A 101	115.545	-5.402	4.664	1.00	0.00
ATOM 1479	2HG	PRO A 101	114.302	-6.465	5.351	1.00	0.00
ATOM 1480	1HD	PRO A 101	115.482	-4.497	6.784	1.00	0.00
ATOM 1481	2HD	PRO A 101	114.940	-6.018	7.522	1.00	0.00
ATOM 1482	N	SER A 102	118.367	-5.037	4.801	1.00	0.00
ATOM 1483	CA	SER A 102	119.297	-4.341	3.919	1.00	0.00
ATOM 1484	C	SER A 102	118.912	-2.873	3.773	1.00	0.00
ATOM 1485	O	SER A 102	119.748	-1.983	3.931	1.00	0.00
ATOM 1486	CB	SER A 102	119.328	-5.012	2.544	1.00	0.00
ATOM 1487	OG	SER A 102	118.028	-5.404	2.138	1.00	0.00
ATOM 1488	H	SER A 102	117.592	-4.554	5.156	1.00	0.00
ATOM 1489	HA	SER A 102	120.281	-4.401	4.361	1.00	0.00
ATOM 1490	1HB	SER A 102	119.724	-4.319	1.817	1.00	0.00
ATOM 1491	2HB	SER A 102	119.958	-5.888	2.587	1.00	0.00

ATOM 1492	HG	SER A 102	117.584	-4.662	1.720	1.00	0.00
ATOM 1493	N	SER A 103	117.641	-2.626	3.472	1.00	0.00
ATOM 1494	CA	SER A 103	117.145	-1.265	3.305	1.00	0.00
ATOM 1495	C	SER A 103	115.622	-1.246	3.240	1.00	0.00
ATOM 1496	O	SER A 103	114.978	-2.295	3.195	1.00	0.00
ATOM 1497	CB	SER A 103	117.729	-0.639	2.037	1.00	0.00
ATOM 1498	OG	SER A 103	118.925	0.066	2.321	1.00	0.00
ATOM 1499	H	SER A 103	117.022	-3.378	3.359	1.00	0.00
ATOM 1500	HA	SER A 103	117.465	-0.689	4.160	1.00	0.00
ATOM 1501	1HB	SER A 103	117.946	-1.417	1.321	1.00	0.00
ATOM 1502	2HB	SER A 103	117.011	0.048	1.615	1.00	0.00
ATOM 1503	HG	SER A 103	119.621	-0.234	1.732	1.00	0.00
ATOM 1504	N	GLY A 104	115.049	-0.046	3.236	1.00	0.00
ATOM 1505	CA	GLY A 104	113.605	0.086	3.176	1.00	0.00
ATOM 1506	C	GLY A 104	113.168	1.467	2.728	1.00	0.00
ATOM 1507	O	GLY A 104	112.708	2.251	3.585	1.00	0.00
ATOM 1508	OXT	GLY A 104	113.285	1.764	1.521	1.00	0.00
ATOM 1509	H	GLY A 104	115.612	0.755	3.273	1.00	0.00
ATOM 1510	1HA	GLY A 104	113.216	-0.645	2.484	1.00	0.00
ATOM 1511	2HA	GLY A 104	113.196	-0.108	4.157	1.00	0.00
TER 1512		GLY A 104					
ENDMDL							

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## 立体構造座標表 9

ATOM 1	N	GLY A	1	127.996	-5.495	4.967	1.00	0.00
ATOM 2	CA	GLY A	1	127.436	-4.222	5.499	1.00	0.00
ATOM 3	C	GLY A	1	127.407	-3.121	4.459	1.00	0.00
ATOM 4	O	GLY A	1	126.530	-2.258	4.483	1.00	0.00



ATOM 5	1H	GLY A	1	129.036	-5.459	4.975	1.00	0.00
ATOM 6	2H	GLY A	1	127.674	-5.646	3.989	1.00	0.00
ATOM 7	3H	GLY A	1	127.683	-6.296	5.551	1.00	0.00
ATOM 8	1HA	GLY A	1	126.428	-4.402	5.845	1.00	0.00
ATOM 9	2HA	GLY A	1	128.040	-3.898	6.334	1.00	0.00
ATOM 10	N	SER A	2	128.369	-3.150	3.543	1.00	0.00
ATOM 11	CA	SER A	2	128.452	-2.145	2.488	1.00	0.00
ATOM 12	C	SER A	2	127.262	-2.254	1.539	1.00	0.00
ATOM 13	O	SER A	2	126.460	-1.327	1.425	1.00	0.00
ATOM 14	CB	SER A	2	129.758	-2.301	1.707	1.00	0.00
ATOM 15	OG	SER A	2	130.194	-3.649	1.704	1.00	0.00
ATOM 16	H	SER A	2	129.040	-3.863	3.576	1.00	0.00
ATOM 17	HA	SER A	2	128.436	-1.172	2.956	1.00	0.00
ATOM 18	1HB	SER A	2	129.604	-1.984	0.686	1.00	0.00
ATOM 19	2HB	SER A	2	130.522	-1.688	2.163	1.00	0.00
ATOM 20	HG	SER A	2	130.040	-4.034	0.839	1.00	0.00
ATOM 21	N	SER A	3	127.155	-3.392	0.861	1.00	0.00
ATOM 22	CA	SER A	3	126.063	-3.622	-0.079	1.00	0.00
ATOM 23	C	SER A	3	124.712	-3.534	0.624	1.00	0.00
ATOM 24	O	SER A	3	124.618	-3.732	1.836	1.00	0.00
ATOM 25	CB	SER A	3	126.216	-4.989	-0.747	1.00	0.00
ATOM 26	OG	SER A	3	126.958	-4.889	-1.950	1.00	0.00
ATOM 27	H	SER A	3	127.825	-4.094	0.995	1.00	0.00
ATOM 28	HA	SER A	3	126.111	-2.853	-0.836	1.00	0.00
ATOM 29	1HB	SER A	3	126.733	-5.659	-0.076	1.00	0.00
ATOM 30	2HB	SER A	3	125.239	-5.388	-0.972	1.00	0.00
ATOM 31	HG	SER A	3	127.724	-4.327	-1.809	1.00	0.00
ATOM 32	N	GLY A	4	123.668	-3.236	-0.143	1.00	0.00
ATOM 33	CA	GLY A	4	122.338	-3.127	0.425	1.00	0.00

ATOM 34	C	GLY A	4	122.252	-2.063	1.500	1.00	0.00
ATOM 35	O	GLY A	4	123.271	-1.522	1.928	1.00	0.00
ATOM 36	H	GLY A	4	123.804	-3.088	-1.103	1.00	0.00
ATOM 37	1HA	GLY A	4	121.641	-2.885	-0.364	1.00	0.00
ATOM 38	2HA	GLY A	4	122.062	-4.080	0.853	1.00	0.00
ATOM 39	N	SER A	5	121.032	-1.761	1.938	1.00	0.00
ATOM 40	CA	SER A	5	120.812	-0.752	2.971	1.00	0.00
ATOM 41	C	SER A	5	121.111	0.647	2.440	1.00	0.00
ATOM 42	O	SER A	5	120.218	1.488	2.344	1.00	0.00
ATOM 43	CB	SER A	5	121.680	-1.042	4.198	1.00	0.00
ATOM 44	OG	SER A	5	120.979	-0.763	5.397	1.00	0.00
ATOM 45	H	SER A	5	120.260	-2.229	1.555	1.00	0.00
ATOM 46	HA	SER A	5	119.773	-0.799	3.259	1.00	0.00
ATOM 47	1HB	SER A	5	121.964	-2.085	4.197	1.00	0.00
ATOM 48	2HB	SER A	5	122.568	-0.428	4.162	1.00	0.00
ATOM 49	HG	SER A	5	120.189	-1.306	5.440	1.00	0.00
ATOM 50	N	SER A	6	122.373	0.889	2.097	1.00	0.00
ATOM 51	CA	SER A	6	122.793	2.186	1.576	1.00	0.00
ATOM 52	C	SER A	6	122.700	3.261	2.653	1.00	0.00
ATOM 53	O	SER A	6	121.654	3.883	2.837	1.00	0.00
ATOM 54	CB	SER A	6	121.937	2.580	0.369	1.00	0.00
ATOM 55	OG	SER A	6	121.576	1.443	-0.394	1.00	0.00
ATOM 56	H	SER A	6	123.040	0.178	2.198	1.00	0.00
ATOM 57	HA	SER A	6	123.822	2.098	1.262	1.00	0.00
ATOM 58	1HB	SER A	6	121.038	3.068	0.713	1.00	0.00
ATOM 59	2HB	SER A	6	122.497	3.259	-0.259	1.00	0.00
ATOM 60	HG	SER A	6	120.764	1.623	-0.873	1.00	0.00
ATOM 61	N	GLY A	7	123.804	3.476	3.363	1.00	0.00
ATOM 62	CA	GLY A	7	123.829	4.477	4.412	1.00	0.00

ATOM 63	C	GLY A	7	125.104	5.296	4.400	1.00	0.00
ATOM 64	O	GLY A	7	125.065	6.520	4.527	1.00	0.00
ATOM 65	H	GLY A	7	124.609	2.950	3.170	1.00	0.00
ATOM 66	1HA	GLY A	7	122.986	5.140	4.283	1.00	0.00
ATOM 67	2HA	GLY A	7	123.740	3.983	5.369	1.00	0.00
ATOM 68	N	LEU A	8	126.238	4.620	4.248	1.00	0.00
ATOM 69	CA	LEU A	8	127.532	5.292	4.219	1.00	0.00
ATOM 70	C	LEU A	8	128.105	5.309	2.805	1.00	0.00
ATOM 71	O	LEU A	8	128.927	4.466	2.448	1.00	0.00
ATOM 72	CB	LEU A	8	128.512	4.600	5.169	1.00	0.00
ATOM 73	CG	LEU A	8	127.931	4.217	6.531	1.00	0.00
ATOM 74	CD1	LEU A	8	128.639	2.991	7.087	1.00	0.00
ATOM 75	CD2	LEU A	8	128.039	5.384	7.502	1.00	0.00
ATOM 76	H	LEU A	8	126.204	3.645	4.152	1.00	0.00
ATOM 77	HA	LEU A	8	127.384	6.310	4.548	1.00	0.00
ATOM 78	1HB	LEU A	8	128.872	3.702	4.689	1.00	0.00
ATOM 79	2HB	LEU A	8	129.349	5.261	5.333	1.00	0.00
ATOM 80	HG	LEU A	8	126.885	3.974	6.415	1.00	0.00
ATOM 81	1HD1	LEU A	8	128.427	2.901	8.143	1.00	0.00
ATOM 82	2HD1	LEU A	8	129.705	3.094	6.942	1.00	0.00
ATOM 83	3HD1	LEU A	8	128.288	2.108	6.573	1.00	0.00
ATOM 84	1HD2	LEU A	8	127.268	5.299	8.253	1.00	0.00
ATOM 85	2HD2	LEU A	8	127.917	6.312	6.964	1.00	0.00
ATOM 86	3HD2	LEU A	8	129.008	5.368	7.978	1.00	0.00
ATOM 87	N	ALA A	9	127.663	6.274	2.004	1.00	0.00
ATOM 88	CA	ALA A	9	128.131	6.400	0.630	1.00	0.00
ATOM 89	C	ALA A	9	128.306	7.864	0.241	1.00	0.00
ATOM 90	O	ALA A	9	127.411	8.683	0.450	1.00	0.00
ATOM 91	CB	ALA A	9	127.166	5.710	-0.321	1.00	0.00

ATOM 92	H	ALA A	9	127.007	6.917	2.347	1.00	0.00
ATOM 93	HA	ALA A	9	129.088	5.903	0.558	1.00	0.00
ATOM 94	1HB	ALA A	9	126.500	6.444	-0.753	1.00	0.00
ATOM 95	2HB	ALA A	9	126.588	4.976	0.222	1.00	0.00
ATOM 96	3HB	ALA A	9	127.721	5.222	-1.107	1.00	0.00
ATOM 97	N	MET A	10	129.464	8.186	-0.326	1.00	0.00
ATOM 98	CA	MET A	10	129.755	9.553	-0.746	1.00	0.00
ATOM 99	C	MET A	10	130.359	9.575	-2.148	1.00	0.00
ATOM 100	O	MET A	10	131.577	9.500	-2.309	1.00	0.00
ATOM 101	CB	MET A	10	130.713	10.218	0.244	1.00	0.00
ATOM 102	CG	MET A	10	130.546	11.726	0.332	1.00	0.00
ATOM 103	SD	MET A	10	132.032	12.556	0.926	1.00	0.00
ATOM 104	CE	MET A	10	132.482	11.502	2.302	1.00	0.00
ATOM 105	H	MET A	10	130.137	7.489	-0.466	1.00	0.00
ATOM 106	HA	MET A	10	128.826	10.101	-0.756	1.00	0.00
ATOM 107	1HB	MET A	10	130.546	9.801	1.225	1.00	0.00
ATOM 108	2HB	MET A	10	131.728	10.008	-0.059	1.00	0.00
ATOM 109	1HG	MET A	10	130.307	12.107	-0.649	1.00	0.00
ATOM 110	2HG	MET A	10	129.733	11.945	1.009	1.00	0.00
ATOM 111	1HE	MET A	10	131.660	10.838	2.531	1.00	0.00
ATOM 112	2HE	MET A	10	132.704	12.111	3.166	1.00	0.00
ATOM 113	3HE	MET A	10	133.353	10.919	2.040	1.00	0.00
ATOM 114	N	PRO A	11	129.510	9.679	-3.186	1.00	0.00
ATOM 115	CA	PRO A	11	129.968	9.712	-4.578	1.00	0.00
ATOM 116	C	PRO A	11	130.980	10.829	-4.830	1.00	0.00
ATOM 117	O	PRO A	11	132.013	10.604	-5.461	1.00	0.00
ATOM 118	CB	PRO A	11	128.690	9.958	-5.383	1.00	0.00
ATOM 119	CG	PRO A	11	127.575	9.536	-4.490	1.00	0.00
ATOM 120	CD	PRO A	11	128.044	9.776	-3.082	1.00	0.00

ATOM 121	HA	PRO A	11	130.404	8.768	-4.869	1.00	0.00
ATOM 122	1HB	PRO A	11	128.619	11.004	-5.640	1.00	0.00
ATOM 123	2HB	PRO A	11	128.714	9.365	-6.286	1.00	0.00
ATOM 124	1HG	PRO A	11	126.699	10.131	-4.695	1.00	0.00
ATOM 125	2HG	PRO A	11	127.361	8.488	-4.639	1.00	0.00
ATOM 126	1HD	PRO A	11	127.745	10.759	-2.747	1.00	0.00
ATOM 127	2HD	PRO A	11	127.654	9.016	-2.420	1.00	0.00
ATOM 128	N	PRO A	12	130.705	12.051	-4.336	1.00	0.00
ATOM 129	CA	PRO A	12	131.611	13.191	-4.516	1.00	0.00
ATOM 130	C	PRO A	12	132.995	12.918	-3.938	1.00	0.00
ATOM 131	O	PRO A	12	133.971	13.573	-4.303	1.00	0.00
ATOM 132	CB	PRO A	12	130.928	14.329	-3.749	1.00	0.00
ATOM 133	CG	PRO A	12	129.499	13.920	-3.643	1.00	0.00
ATOM 134	CD	PRO A	12	129.506	12.421	-3.563	1.00	0.00
ATOM 135	HA	PRO A	12	131.705	13.460	-5.558	1.00	0.00
ATOM 136	1HB	PRO A	12	131.382	14.431	-2.775	1.00	0.00
ATOM 137	2HB	PRO A	12	131.033	15.251	-4.300	1.00	0.00
ATOM 138	1HG	PRO A	12	129.061	14.342	-2.750	1.00	0.00
ATOM 139	2HG	PRO A	12	128.957	14.246	-4.519	1.00	0.00
ATOM 140	1HD	PRO A	12	129.593	12.098	-2.536	1.00	0.00
ATOM 141	2HD	PRO A	12	128.615	12.015	-4.013	1.00	0.00
ATOM 142	N	GLY A	13	133.070	11.946	-3.033	1.00	0.00
ATOM 143	CA	GLY A	13	134.339	11.603	-2.418	1.00	0.00
ATOM 144	C	GLY A	13	135.224	10.780	-3.333	1.00	0.00
ATOM 145	O	GLY A	13	135.246	10.995	-4.545	1.00	0.00
ATOM 146	H	GLY A	13	132.258	11.458	-2.781	1.00	0.00
ATOM 147	1HA	GLY A	13	134.858	12.515	-2.158	1.00	0.00
ATOM 148	2HA	GLY A	13	134.149	11.040	-1.517	1.00	0.00
ATOM 149	N	ASN A	14	135.956	9.835	-2.753	1.00	0.00

ATOM 150	CA	ASN A	14	136.846	8.976	-3.524	1.00	0.00
ATOM 151	C	ASN A	14	136.100	7.759	-4.061	1.00	0.00
ATOM 152	O	ASN A	14	136.231	7.404	-5.232	1.00	0.00
ATOM 153	CB	ASN A	14	138.027	8.525	-2.662	1.00	0.00
ATOM 154	CG	ASN A	14	138.857	9.692	-2.162	1.00	0.00
ATOM 155	OD1	ASN A	14	138.854	10.769	-2.756	1.00	0.00
ATOM 156	ND2	ASN A	14	139.573	9.481	-1.064	1.00	0.00
ATOM 157	H	ASN A	14	135.895	9.712	-1.782	1.00	0.00
ATOM 158	HA	ASN A	14	137.220	9.551	-4.358	1.00	0.00
ATOM 159	1HB	ASN A	14	137.653	7.982	-1.806	1.00	0.00
ATOM 160	2HB	ASN A	14	138.663	7.876	-3.245	1.00	0.00
ATOM 161	1HD2	ASN A	14	139.527	8.597	-0.644	1.00	0.00
ATOM 162	2HD2	ASN A	14	140.120	10.217	-0.719	1.00	0.00
ATOM 163	N	SER A	15	135.315	7.125	-3.196	1.00	0.00
ATOM 164	CA	SER A	15	134.547	5.947	-3.583	1.00	0.00
ATOM 165	C	SER A	15	133.644	5.488	-2.442	1.00	0.00
ATOM 166	O	SER A	15	132.494	5.108	-2.662	1.00	0.00
ATOM 167	CB	SER A	15	135.486	4.812	-3.996	1.00	0.00
ATOM 168	OG	SER A	15	136.245	4.351	-2.892	1.00	0.00
ATOM 169	H	SER A	15	135.251	7.455	-2.275	1.00	0.00
ATOM 170	HA	SER A	15	133.930	6.217	-4.427	1.00	0.00
ATOM 171	1HB	SER A	15	134.904	3.989	-4.385	1.00	0.00
ATOM 172	2HB	SER A	15	136.162	5.168	-4.759	1.00	0.00
ATOM 173	HG	SER A	15	137.023	4.903	-2.786	1.00	0.00
ATOM 174	N	HIS A	16	134.175	5.525	-1.224	1.00	0.00
ATOM 175	CA	HIS A	16	133.417	5.111	-0.049	1.00	0.00
ATOM 176	C	HIS A	16	133.979	5.757	1.214	1.00	0.00
ATOM 177	O	HIS A	16	133.236	6.307	2.026	1.00	0.00
ATOM 178	CB	HIS A	16	133.435	3.586	0.086	1.00	0.00

ATOM 208	HA	LEU A	18	139.370	4.264	3.047	1.00	0.00
ATOM 209	1HB	LEU A	18	140.207	4.868	0.216	1.00	0.00
ATOM 210	2HB	LEU A	18	140.775	3.563	1.240	1.00	0.00
ATOM 211	HG	LEU A	18	137.875	3.684	0.534	1.00	0.00
ATOM 212	1HD1	LEU A	18	138.111	2.991	-1.597	1.00	0.00
ATOM 213	2HD1	LEU A	18	139.612	2.126	-1.266	1.00	0.00
ATOM 214	3HD1	LEU A	18	139.632	3.876	-1.488	1.00	0.00
ATOM 215	1HD2	LEU A	18	137.880	1.440	1.041	1.00	0.00
ATOM 216	2HD2	LEU A	18	139.107	2.045	2.154	1.00	0.00
ATOM 217	3HD2	LEU A	18	139.590	1.246	0.658	1.00	0.00
ATOM 218	N	GLU A	19	141.003	5.945	3.825	1.00	0.00
ATOM 219	CA	GLU A	19	142.020	6.879	4.293	1.00	0.00
ATOM 220	C	GLU A	19	143.006	6.186	5.228	1.00	0.00
ATOM 221	O	GLU A	19	142.874	4.996	5.513	1.00	0.00
ATOM 222	CB	GLU A	19	141.365	8.062	5.010	1.00	0.00
ATOM 223	CG	GLU A	19	140.356	7.647	6.069	1.00	0.00
ATOM 224	CD	GLU A	19	140.441	8.499	7.320	1.00	0.00
ATOM 225	OE1	GLU A	19	139.379	8.824	7.891	1.00	0.00
ATOM 226	OE2	GLU A	19	141.570	8.843	7.730	1.00	0.00
ATOM 227	H	GLU A	19	140.647	5.276	4.445	1.00	0.00
ATOM 228	HA	GLU A	19	142.556	7.246	3.431	1.00	0.00
ATOM 229	1HB	GLU A	19	142.135	8.649	5.487	1.00	0.00
ATOM 230	2HB	GLU A	19	140.856	8.674	4.280	1.00	0.00
ATOM 231	1HG	GLU A	19	139.363	7.738	5.657	1.00	0.00
ATOM 232	2HG	GLU A	19	140.540	6.618	6.340	1.00	0.00
ATOM 233	N	VAL A	20	143.994	6.939	5.702	1.00	0.00
ATOM 234	CA	VAL A	20	145.003	6.398	6.605	1.00	0.00
ATOM 235	C	VAL A	20	144.363	5.835	7.870	1.00	0.00
ATOM 236	O	VAL A	20	143.408	6.402	8.400	1.00	0.00

ATOM 237	CB	VAL A	20	146.035	7.470	7.000	1.00	0.00
ATOM 238	CG1	VAL A	20	147.175	6.849	7.793	1.00	0.00
ATOM 239	CG2	VAL A	20	146.563	8.184	5.765	1.00	0.00
ATOM 240	H	VAL A	20	144.045	7.882	5.438	1.00	0.00
ATOM 241	HA	VAL A	20	145.520	5.603	6.089	1.00	0.00
ATOM 242	HB	VAL A	20	145.546	8.199	7.628	1.00	0.00
ATOM 243	1HG1	VAL A	20	146.826	6.589	8.781	1.00	0.00
ATOM 244	2HG1	VAL A	20	147.987	7.558	7.873	1.00	0.00
ATOM 245	3HG1	VAL A	20	147.523	5.960	7.289	1.00	0.00
ATOM 246	1HG2	VAL A	20	145.905	9.001	5.513	1.00	0.00
ATOM 247	2HG2	VAL A	20	146.608	7.489	4.939	1.00	0.00
ATOM 248	3HG2	VAL A	20	147.552	8.568	5.965	1.00	0.00
ATOM 249	N	GLY A	21	144.897	4.714	8.348	1.00	0.00
ATOM 250	CA	GLY A	21	144.365	4.094	9.547	1.00	0.00
ATOM 251	C	GLY A	21	143.362	2.999	9.237	1.00	0.00
ATOM 252	O	GLY A	21	143.332	1.968	9.909	1.00	0.00
ATOM 253	H	GLY A	21	145.657	4.307	7.882	1.00	0.00
ATOM 254	1HA	GLY A	21	145.181	3.670	10.111	1.00	0.00
ATOM 255	2HA	GLY A	21	143.881	4.850	10.147	1.00	0.00
ATOM 256	N	SER A	22	142.540	3.222	8.216	1.00	0.00
ATOM 257	CA	SER A	22	141.533	2.247	7.819	1.00	0.00
ATOM 258	C	SER A	22	142.140	1.169	6.927	1.00	0.00
ATOM 259	O	SER A	22	143.184	1.377	6.308	1.00	0.00
ATOM 260	CB	SER A	22	140.381	2.940	7.088	1.00	0.00
ATOM 261	OG	SER A	22	139.915	4.061	7.820	1.00	0.00
ATOM 262	H	SER A	22	142.615	4.063	7.719	1.00	0.00
ATOM 263	HA	SER A	22	141.150	1.782	8.716	1.00	0.00
ATOM 264	1HB	SER A	22	140.722	3.275	6.120	1.00	0.00
ATOM 265	2HB	SER A	22	139.566	2.244	6.962	1.00	0.00



ATOM 266	HG	SER A	22	139.825	3.824	8.746	1.00	0.00
ATOM 267	N	LEU A	23	141.480	0.017	6.867	1.00	0.00
ATOM 268	CA	LEU A	23	141.956	-1.095	6.052	1.00	0.00
ATOM 269	C	LEU A	23	141.365	-1.033	4.648	1.00	0.00
ATOM 270	O	LEU A	23	140.256	-0.536	4.451	1.00	0.00
ATOM 271	CB	LEU A	23	141.597	-2.428	6.711	1.00	0.00
ATOM 272	CG	LEU A	23	142.398	-2.764	7.970	1.00	0.00
ATOM 273	CD1	LEU A	23	141.572	-3.626	8.913	1.00	0.00
ATOM 274	CD2	LEU A	23	143.697	-3.466	7.602	1.00	0.00
ATOM 275	H	LEU A	23	140.655	-0.089	7.384	1.00	0.00
ATOM 276	HA	LEU A	23	143.031	-1.017	5.981	1.00	0.00
ATOM 277	1HB	LEU A	23	140.549	-2.406	6.971	1.00	0.00
ATOM 278	2HB	LEU A	23	141.755	-3.216	5.990	1.00	0.00
ATOM 279	HG	LEU A	23	142.646	-1.848	8.485	1.00	0.00
ATOM 280	1HD1	LEU A	23	141.798	-4.668	8.739	1.00	0.00
ATOM 281	2HD1	LEU A	23	140.522	-3.451	8.734	1.00	0.00
ATOM 282	3HD1	LEU A	23	141.811	-3.372	9.935	1.00	0.00
ATOM 283	1HD2	LEU A	23	144.307	-3.580	8.485	1.00	0.00
ATOM 284	2HD2	LEU A	23	144.230	-2.877	6.870	1.00	0.00
ATOM 285	3HD2	LEU A	23	143.475	-4.439	7.190	1.00	0.00
ATOM 286	N	ALA A	24	142.112	-1.543	3.674	1.00	0.00
ATOM 287	CA	ALA A	24	141.663	-1.547	2.287	1.00	0.00
ATOM 288	C	ALA A	24	142.247	-2.733	1.526	1.00	0.00
ATOM 289	O	ALA A	24	143.268	-3.294	1.920	1.00	0.00
ATOM 290	CB	ALA A	24	142.041	-0.242	1.605	1.00	0.00
ATOM 291	H	ALA A	24	142.987	-1.926	3.894	1.00	0.00
ATOM 292	HA	ALA A	24	140.585	-1.627	2.286	1.00	0.00
ATOM 293	1HB	ALA A	24	143.115	-0.194	1.488	1.00	0.00
ATOM 294	2HB	ALA A	24	141.710	0.590	2.210	1.00	0.00

ATOM 295	3HB	ALA A	24	141.571	-0.191	0.635	1.00	0.00
ATOM 296	N	GLU A	25	141.590	-3.108	0.432	1.00	0.00
ATOM 297	CA	GLU A	25	142.043	-4.228	-0.385	1.00	0.00
ATOM 298	C	GLU A	25	142.350	-3.772	-1.808	1.00	0.00
ATOM 299	O	GLU A	25	141.727	-2.844	-2.321	1.00	0.00
ATOM 300	CB	GLU A	25	140.984	-5.332	-0.407	1.00	0.00
ATOM 301	CG	GLU A	25	141.514	-6.676	-0.879	1.00	0.00
ATOM 302	CD	GLU A	25	140.504	-7.441	-1.711	1.00	0.00
ATOM 303	OE1	GLU A	25	140.920	-8.347	-2.463	1.00	0.00
ATOM 304	OE2	GLU A	25	139.298	-7.134	-1.611	1.00	0.00
ATOM 305	H	GLU A	25	140.781	-2.621	0.169	1.00	0.00
ATOM 306	HA	GLU A	25	142.947	-4.617	0.058	1.00	0.00
ATOM 307	1HB	GLU A	25	140.589	-5.454	0.590	1.00	0.00
ATOM 308	2HB	GLU A	25	140.184	-5.032	-1.068	1.00	0.00
ATOM 309	1HG	GLU A	25	142.399	-6.511	-1.476	1.00	0.00
ATOM 310	2HG	GLU A	25	141.771	-7.270	-0.013	1.00	0.00
ATOM 311	N	VAL A	26	143.315	-4.433	-2.442	1.00	0.00
ATOM 312	CA	VAL A	26	143.705	-4.095	-3.805	1.00	0.00
ATOM 313	C	VAL A	26	143.324	-5.207	-4.777	1.00	0.00
ATOM 314	O	VAL A	26	143.308	-6.383	-4.414	1.00	0.00
ATOM 315	CB	VAL A	26	145.219	-3.835	-3.909	1.00	0.00
ATOM 316	CG1	VAL A	26	145.574	-3.289	-5.284	1.00	0.00
ATOM 317	CG2	VAL A	26	145.674	-2.882	-2.814	1.00	0.00
ATOM 318	H	VAL A	26	143.776	-5.165	-1.979	1.00	0.00
ATOM 319	HA	VAL A	26	143.184	-3.191	-4.086	1.00	0.00
ATOM 320	HB	VAL A	26	145.735	-4.775	-3.776	1.00	0.00
ATOM 321	1HG1	VAL A	26	145.885	-4.100	-5.925	1.00	0.00
ATOM 322	2HG1	VAL A	26	146.379	-2.575	-5.190	1.00	0.00
ATOM 323	3HG1	VAL A	26	144.710	-2.802	-5.712	1.00	0.00

ATOM 324	1HG2	VAL	A	26	145.138	-1.948	-2.905	1.00	0.00
ATOM 325	2HG2	VAL	A	26	146.733	-2.700	-2.913	1.00	0.00
ATOM 326	3HG2	VAL	A	26	145.472	-3.321	-1.849	1.00	0.00
ATOM 327	N	LYS	A	27	143.019	-4.827	-6.013	1.00	0.00
ATOM 328	CA	LYS	A	27	142.638	-5.792	-7.038	1.00	0.00
ATOM 329	C	LYS	A	27	143.856	-6.246	-7.835	1.00	0.00
ATOM 330	O	LYS	A	27	144.131	-5.728	-8.917	1.00	0.00
ATOM 331	CB	LYS	A	27	141.596	-5.184	-7.978	1.00	0.00
ATOM 332	CG	LYS	A	27	140.860	-6.215	-8.820	1.00	0.00
ATOM 333	CD	LYS	A	27	141.342	-6.206	-10.262	1.00	0.00
ATOM 334	CE	LYS	A	27	141.289	-7.596	-10.876	1.00	0.00
ATOM 335	NZ	LYS	A	27	141.792	-7.605	-12.277	1.00	0.00
ATOM 336	H	LYS	A	27	143.050	-3.875	-6.241	1.00	0.00
ATOM 337	HA	LYS	A	27	142.208	-6.649	-6.542	1.00	0.00
ATOM 338	1HB	LYS	A	27	140.867	-4.647	-7.389	1.00	0.00
ATOM 339	2HB	LYS	A	27	142.089	-4.491	-8.645	1.00	0.00
ATOM 340	1HG	LYS	A	27	141.031	-7.196	-8.400	1.00	0.00
ATOM 341	2HG	LYS	A	27	139.803	-5.993	-8.801	1.00	0.00
ATOM 342	1HD	LYS	A	27	140.712	-5.546	-10.838	1.00	0.00
ATOM 343	2HD	LYS	A	27	142.362	-5.850	-10.289	1.00	0.00
ATOM 344	1HE	LYS	A	27	141.897	-8.262	-10.281	1.00	0.00
ATOM 345	2HE	LYS	A	27	140.265	-7.940	-10.867	1.00	0.00
ATOM 346	1HZ	LYS	A	27	142.831	-7.630	-12.284	1.00	0.00
ATOM 347	2HZ	LYS	A	27	141.475	-6.749	-12.776	1.00	0.00
ATOM 348	3HZ	LYS	A	27	141.431	-8.439	-12.781	1.00	0.00
ATOM 349	N	GLU	A	28	144.583	-7.219	-7.294	1.00	0.00
ATOM 350	CA	GLU	A	28	145.772	-7.744	-7.955	1.00	0.00
ATOM 351	C	GLU	A	28	145.696	-9.263	-8.080	1.00	0.00
ATOM 352	O	GLU	A	28	144.649	-9.864	-7.844	1.00	0.00

ATOM 353	CB	GLU A	28	147.030	-7.343	-7.180	1.00	0.00
ATOM 354	CG	GLU A	28	148.126	-6.764	-8.060	1.00	0.00
ATOM 355	CD	GLU A	28	148.802	-5.560	-7.433	1.00	0.00
ATOM 356	OE1	GLU A	28	149.942	-5.707	-6.944	1.00	0.00
ATOM 357	OE2	GLU A	28	148.191	-4.471	-7.431	1.00	0.00
ATOM 358	H	GLU A	28	144.312	-7.593	-6.429	1.00	0.00
ATOM 359	HA	GLU A	28	145.817	-7.315	-8.945	1.00	0.00
ATOM 360	1HB	GLU A	28	146.763	-6.603	-6.441	1.00	0.00
ATOM 361	2HB	GLU A	28	147.424	-8.215	-6.678	1.00	0.00
ATOM 362	1HG	GLU A	28	148.871	-7.526	-8.233	1.00	0.00
ATOM 363	2HG	GLU A	28	147.693	-6.465	-9.003	1.00	0.00
ATOM 364	N	ASN A	29	146.815	-9.877	-8.453	1.00	0.00
ATOM 365	CA	ASN A	29	146.875	-11.325	-8.608	1.00	0.00
ATOM 366	C	ASN A	29	146.931	-12.016	-7.247	1.00	0.00
ATOM 367	O	ASN A	29	146.068	-12.831	-6.920	1.00	0.00
ATOM 368	CB	ASN A	29	148.093	-11.719	-9.448	1.00	0.00
ATOM 369	CG	ASN A	29	147.735	-11.979	-10.898	1.00	0.00
ATOM 370	OD1	ASN A	29	147.584	-13.127	-11.316	1.00	0.00
ATOM 371	ND2	ASN A	29	147.598	-10.910	-11.674	1.00	0.00
ATOM 372	H	ASN A	29	147.619	-9.344	-8.626	1.00	0.00
ATOM 373	HA	ASN A	29	145.978	-11.640	-9.121	1.00	0.00
ATOM 374	1HB	ASN A	29	148.819	-10.921	-9.413	1.00	0.00
ATOM 375	2HB	ASN A	29	148.531	-12.617	-9.037	1.00	0.00
ATOM 376	1HD2	ASN A	29	147.734	-10.027	-11.273	1.00	0.00
ATOM 377	2HD2	ASN A	29	147.368	-11.049	-12.616	1.00	0.00
ATOM 378	N	PRO A	30	147.953	-11.697	-6.434	1.00	0.00
ATOM 379	CA	PRO A	30	148.120	-12.289	-5.105	1.00	0.00
ATOM 380	C	PRO A	30	147.205	-11.646	-4.063	1.00	0.00
ATOM 381	O	PRO A	30	147.389	-10.485	-3.701	1.00	0.00

ATOM 382	CB	PRO A	30	149.583	-11.995	-4.782	1.00	0.00
ATOM 383	CG	PRO A	30	149.872	-10.721	-5.497	1.00	0.00
ATOM 384	CD	PRO A	30	149.028	-10.735	-6.746	1.00	0.00
ATOM 385	HA	PRO A	30	147.959	-13.357	-5.123	1.00	0.00
ATOM 386	1HB	PRO A	30	149.705	-11.890	-3.714	1.00	0.00
ATOM 387	2HB	PRO A	30	150.205	-12.800	-5.145	1.00	0.00
ATOM 388	1HG	PRO A	30	149.602	-9.881	-4.872	1.00	0.00
ATOM 389	2HG	PRO A	30	150.920	-10.674	-5.754	1.00	0.00
ATOM 390	1HD	PRO A	30	148.621	-9.752	-6.936	1.00	0.00
ATOM 391	2HD	PRO A	30	149.612	-11.070	-7.590	1.00	0.00
ATOM 392	N	PRO A	31	146.201	-12.393	-3.566	1.00	0.00
ATOM 393	CA	PRO A	31	145.261	-11.880	-2.562	1.00	0.00
ATOM 394	C	PRO A	31	145.954	-11.524	-1.252	1.00	0.00
ATOM 395	O	PRO A	31	146.396	-12.403	-0.513	1.00	0.00
ATOM 396	CB	PRO A	31	144.280	-13.041	-2.347	1.00	0.00
ATOM 397	CG	PRO A	31	144.464	-13.934	-3.527	1.00	0.00
ATOM 398	CD	PRO A	31	145.900	-13.784	-3.937	1.00	0.00
ATOM 399	HA	PRO A	31	144.725	-11.017	-2.930	1.00	0.00
ATOM 400	1HB	PRO A	31	144.523	-13.553	-1.427	1.00	0.00
ATOM 401	2HB	PRO A	31	143.272	-12.660	-2.297	1.00	0.00
ATOM 402	1HG	PRO A	31	144.257	-14.958	-3.251	1.00	0.00
ATOM 403	2HG	PRO A	31	143.812	-13.622	-4.330	1.00	0.00
ATOM 404	1HD	PRO A	31	146.524	-14.474	-3.389	1.00	0.00
ATOM 405	2HD	PRO A	31	146.009	-13.933	-5.000	1.00	0.00
ATOM 406	N	PHE A	32	146.045	-10.228	-0.969	1.00	0.00
ATOM 407	CA	PHE A	32	146.685	-9.757	0.254	1.00	0.00
ATOM 408	C	PHE A	32	145.819	-8.715	0.955	1.00	0.00
ATOM 409	O	PHE A	32	144.887	-8.169	0.365	1.00	0.00
ATOM 410	CB	PHE A	32	148.062	-9.169	-0.058	1.00	0.00

ATOM 411	CG	PHE A	32	148.060	-8.215	-1.219	1.00	0.00
ATOM 412	CD1	PHE A	32	148.759	-8.514	-2.377	1.00	0.00
ATOM 413	CD2	PHE A	32	147.362	-7.020	-1.150	1.00	0.00
ATOM 414	CE1	PHE A	32	148.759	-7.640	-3.448	1.00	0.00
ATOM 415	CE2	PHE A	32	147.359	-6.142	-2.217	1.00	0.00
ATOM 416	CZ	PHE A	32	148.059	-6.452	-3.368	1.00	0.00
ATOM 417	H	PHE A	32	145.674	-9.573	-1.596	1.00	0.00
ATOM 418	HA	PHE A	32	146.807	-10.605	0.911	1.00	0.00
ATOM 419	1HB	PHE A	32	148.421	-8.635	0.809	1.00	0.00
ATOM 420	2HB	PHE A	32	148.746	-9.973	-0.287	1.00	0.00
ATOM 421	HD1	PHE A	32	149.306	-9.443	-2.442	1.00	0.00
ATOM 422	HD2	PHE A	32	146.815	-6.776	-0.252	1.00	0.00
ATOM 423	HE1	PHE A	32	149.308	-7.885	-4.346	1.00	0.00
ATOM 424	HE2	PHE A	32	146.811	-5.213	-2.153	1.00	0.00
ATOM 425	HZ	PHE A	32	148.059	-5.767	-4.202	1.00	0.00
ATOM 426	N	TYR A	33	146.135	-8.443	2.217	1.00	0.00
ATOM 427	CA	TYR A	33	145.387	-7.466	2.999	1.00	0.00
ATOM 428	C	TYR A	33	146.331	-6.522	3.736	1.00	0.00
ATOM 429	O	TYR A	33	147.344	-6.948	4.290	1.00	0.00
ATOM 430	CB	TYR A	33	144.472	-8.176	3.999	1.00	0.00
ATOM 431	CG	TYR A	33	143.246	-8.794	3.366	1.00	0.00
ATOM 432	CD1	TYR A	33	142.976	-10.149	3.508	1.00	0.00
ATOM 433	CD2	TYR A	33	142.360	-8.023	2.625	1.00	0.00
ATOM 434	CE1	TYR A	33	141.857	-10.718	2.931	1.00	0.00
ATOM 435	CE2	TYR A	33	141.238	-8.584	2.045	1.00	0.00
ATOM 436	CZ	TYR A	33	140.992	-9.931	2.200	1.00	0.00
ATOM 437	OH	TYR A	33	139.875	-10.494	1.624	1.00	0.00
ATOM 438	H	TYR A	33	146.890	-8.911	2.633	1.00	0.00
ATOM 439	HA	TYR A	33	144.781	-6.890	2.316	1.00	0.00

ATOM 440	1HB	TYR A	33	145.026	-8.963	4.486	1.00	0.00
ATOM 441	2HB	TYR A	33	144.141	-7.464	4.740	1.00	0.00
ATOM 442	HD1	TYR A	33	143.656	-10.763	4.081	1.00	0.00
ATOM 443	HD2	TYR A	33	142.556	-6.968	2.505	1.00	0.00
ATOM 444	HE1	TYR A	33	141.663	-11.774	3.053	1.00	0.00
ATOM 445	HE2	TYR A	33	140.561	-7.968	1.472	1.00	0.00
ATOM 446	HH	TYR A	33	140.098	-11.360	1.275	1.00	0.00
ATOM 447	N	GLY A	34	145.991	-5.237	3.739	1.00	0.00
ATOM 448	CA	GLY A	34	146.818	-4.253	4.412	1.00	0.00
ATOM 449	C	GLY A	34	146.029	-3.038	4.858	1.00	0.00
ATOM 450	O	GLY A	34	144.844	-2.911	4.549	1.00	0.00
ATOM 451	H	GLY A	34	145.172	-4.955	3.281	1.00	0.00
ATOM 452	1HA	GLY A	34	147.272	-4.712	5.278	1.00	0.00
ATOM 453	2HA	GLY A	34	147.599	-3.933	3.737	1.00	0.00
ATOM 454	N	VAL A	35	146.687	-2.143	5.588	1.00	0.00
ATOM 455	CA	VAL A	35	146.038	-0.932	6.079	1.00	0.00
ATOM 456	C	VAL A	35	146.696	0.316	5.500	1.00	0.00
ATOM 457	O	VAL A	35	147.920	0.388	5.382	1.00	0.00
ATOM 458	CB	VAL A	35	146.078	-0.860	7.619	1.00	0.00
ATOM 459	CG1	VAL A	35	147.514	-0.810	8.119	1.00	0.00
ATOM 460	CG2	VAL A	35	145.288	0.341	8.119	1.00	0.00
ATOM 461	H	VAL A	35	147.629	-2.300	5.802	1.00	0.00
ATOM 462	HA	VAL A	35	145.004	-0.959	5.767	1.00	0.00
ATOM 463	HB	VAL A	35	145.616	-1.754	8.012	1.00	0.00
ATOM 464	1HG1	VAL A	35	147.617	-1.449	8.984	1.00	0.00
ATOM 465	2HG1	VAL A	35	147.765	0.205	8.391	1.00	0.00
ATOM 466	3HG1	VAL A	35	148.179	-1.148	7.339	1.00	0.00
ATOM 467	1HG2	VAL A	35	144.239	0.197	7.903	1.00	0.00
ATOM 468	2HG2	VAL A	35	145.637	1.234	7.622	1.00	0.00

ATOM 469	3HG2	VAL A	35	145.425	0.444	9.185	1.00	0.00
ATOM 470	N	ILE A	36	145.876	1.300	5.143	1.00	0.00
ATOM 471	CA	ILE A	36	146.379	2.546	4.577	1.00	0.00
ATOM 472	C	ILE A	36	147.308	3.255	5.558	1.00	0.00
ATOM 473	O	ILE A	36	147.020	3.340	6.751	1.00	0.00
ATOM 474	CB	ILE A	36	145.228	3.498	4.194	1.00	0.00
ATOM 475	CG1	ILE A	36	144.210	2.776	3.308	1.00	0.00
ATOM 476	CG2	ILE A	36	145.772	4.732	3.486	1.00	0.00
ATOM 477	CD1	ILE A	36	143.058	3.654	2.872	1.00	0.00
ATOM 478	H	ILE A	36	144.911	1.184	5.262	1.00	0.00
ATOM 479	HA	ILE A	36	146.934	2.305	3.681	1.00	0.00
ATOM 480	HB	ILE A	36	144.741	3.820	5.102	1.00	0.00
ATOM 481	1HG1	ILE A	36	144.706	2.416	2.420	1.00	0.00
ATOM 482	2HG1	ILE A	36	143.801	1.936	3.852	1.00	0.00
ATOM 483	1HG2	ILE A	36	145.242	5.607	3.832	1.00	0.00
ATOM 484	2HG2	ILE A	36	145.632	4.626	2.420	1.00	0.00
ATOM 485	3HG2	ILE A	36	146.824	4.838	3.702	1.00	0.00
ATOM 486	1HD1	ILE A	36	142.131	3.246	3.251	1.00	0.00
ATOM 487	2HD1	ILE A	36	143.021	3.690	1.794	1.00	0.00
ATOM 488	3HD1	ILE A	36	143.197	4.651	3.263	1.00	0.00
ATOM 489	N	ARG A	37	148.425	3.761	5.045	1.00	0.00
ATOM 490	CA	ARG A	37	149.398	4.463	5.876	1.00	0.00
ATOM 491	C	ARG A	37	149.620	5.885	5.372	1.00	0.00
ATOM 492	O	ARG A	37	149.301	6.854	6.060	1.00	0.00
ATOM 493	CB	ARG A	37	150.725	3.703	5.895	1.00	0.00
ATOM 494	CG	ARG A	37	150.572	2.216	6.176	1.00	0.00
ATOM 495	CD	ARG A	37	150.497	1.937	7.668	1.00	0.00
ATOM 496	NE	ARG A	37	149.266	2.455	8.261	1.00	0.00
ATOM 497	CZ	ARG A	37	149.103	2.662	9.566	1.00	0.00



ATOM 498	NH1	ARG A	37	150.087	2.396	10.417	1.00	0.00
ATOM 499	NH2	ARG A	37	147.951	3.135	10.023	1.00	0.00
ATOM 500	H	ARG A	37	148.601	3.660	4.086	1.00	0.00
ATOM 501	HA	ARG A	37	149.005	4.507	6.880	1.00	0.00
ATOM 502	1HB	ARG A	37	151.206	3.817	4.934	1.00	0.00
ATOM 503	2HB	ARG A	37	151.359	4.128	6.658	1.00	0.00
ATOM 504	1HG	ARG A	37	149.665	1.864	5.709	1.00	0.00
ATOM 505	2HG	ARG A	37	151.421	1.692	5.762	1.00	0.00
ATOM 506	1HD	ARG A	37	150.539	0.870	7.824	1.00	0.00
ATOM 507	2HD	ARG A	37	151.343	2.404	8.151	1.00	0.00
ATOM 508	HE	ARG A	37	148.523	2.659	7.656	1.00	0.00
ATOM 509	1HH1	ARG A	37	150.957	2.038	10.079	1.00	0.00
ATOM 510	2HH1	ARG A	37	149.958	2.554	11.395	1.00	0.00
ATOM 511	1HH2	ARG A	37	147.206	3.338	9.387	1.00	0.00
ATOM 512	2HH2	ARG A	37	147.828	3.291	11.003	1.00	0.00
ATOM 513	N	TRP A	38	150.168	6.003	4.168	1.00	0.00
ATOM 514	CA	TRP A	38	150.433	7.308	3.573	1.00	0.00
ATOM 515	C	TRP A	38	149.677	7.472	2.256	1.00	0.00
ATOM 516	O	TRP A	38	149.724	6.600	1.389	1.00	0.00
ATOM 517	CB	TRP A	38	151.937	7.494	3.343	1.00	0.00
ATOM 518	CG	TRP A	38	152.271	8.679	2.486	1.00	0.00
ATOM 519	CD1	TRP A	38	152.549	9.947	2.909	1.00	0.00
ATOM 520	CD2	TRP A	38	152.356	8.706	1.056	1.00	0.00
ATOM 521	NE1	TRP A	38	152.802	10.760	1.830	1.00	0.00
ATOM 522	CE2	TRP A	38	152.689	10.021	0.681	1.00	0.00
ATOM 523	CE3	TRP A	38	152.183	7.745	0.057	1.00	0.00
ATOM 524	CZ2	TRP A	38	152.852	10.398	-0.650	1.00	0.00
ATOM 525	CZ3	TRP A	38	152.345	8.119	-1.263	1.00	0.00
ATOM 526	CH2	TRP A	38	152.676	9.435	-1.607	1.00	0.00

ATOM 527	H	TRP A	38	150.401	5.193	3.666	1.00	0.00
ATOM 528	HA	TRP A	38	150.089	8.062	4.266	1.00	0.00
ATOM 529	1HB	TRP A	38	152.427	7.624	4.296	1.00	0.00
ATOM 530	2HB	TRP A	38	152.331	6.611	2.860	1.00	0.00
ATOM 531	HD1	TRP A	38	152.564	10.253	3.945	1.00	0.00
ATOM 532	HE1	TRP A	38	153.026	11.713	1.876	1.00	0.00
ATOM 533	HE3	TRP A	38	151.927	6.725	0.301	1.00	0.00
ATOM 534	HZ2	TRP A	38	153.105	11.409	-0.931	1.00	0.00
ATOM 535	HZ3	TRP A	38	152.214	7.389	-2.050	1.00	0.00
ATOM 536	HH2	TRP A	38	152.793	9.683	-2.653	1.00	0.00
ATOM 537	N	ILE A	39	148.993	8.601	2.114	1.00	0.00
ATOM 538	CA	ILE A	39	148.236	8.890	0.902	1.00	0.00
ATOM 539	C	ILE A	39	148.716	10.190	0.268	1.00	0.00
ATOM 540	O	ILE A	39	148.434	11.278	0.771	1.00	0.00
ATOM 541	CB	ILE A	39	146.726	8.999	1.193	1.00	0.00
ATOM 542	CG1	ILE A	39	146.253	7.793	2.006	1.00	0.00
ATOM 543	CG2	ILE A	39	145.943	9.110	-0.106	1.00	0.00
ATOM 544	CD1	ILE A	39	144.821	7.908	2.482	1.00	0.00
ATOM 545	H	ILE A	39	149.002	9.259	2.839	1.00	0.00
ATOM 546	HA	ILE A	39	148.392	8.079	0.207	1.00	0.00
ATOM 547	HB	ILE A	39	146.556	9.898	1.765	1.00	0.00
ATOM 548	1HG1	ILE A	39	146.329	6.904	1.398	1.00	0.00
ATOM 549	2HG1	ILE A	39	146.885	7.682	2.876	1.00	0.00
ATOM 550	1HG2	ILE A	39	146.511	8.664	-0.909	1.00	0.00
ATOM 551	2HG2	ILE A	39	145.761	10.151	-0.328	1.00	0.00
ATOM 552	3HG2	ILE A	39	145.000	8.593	-0.003	1.00	0.00
ATOM 553	1HD1	ILE A	39	144.804	8.363	3.462	1.00	0.00
ATOM 554	2HD1	ILE A	39	144.379	6.925	2.534	1.00	0.00
ATOM 555	3HD1	ILE A	39	144.261	8.520	1.790	1.00	0.00

ATOM 556	N	GLY A	40	149.446	10.073	-0.836	1.00	0.00
ATOM 557	CA	GLY A	40	149.956	11.250	-1.512	1.00	0.00
ATOM 558	C	GLY A	40	150.450	10.954	-2.913	1.00	0.00
ATOM 559	O	GLY A	40	150.200	9.877	-3.455	1.00	0.00
ATOM 560	H	GLY A	40	149.644	9.181	-1.192	1.00	0.00
ATOM 561	1HA	GLY A	40	149.172	11.988	-1.567	1.00	0.00
ATOM 562	2HA	GLY A	40	150.774	11.655	-0.934	1.00	0.00
ATOM 563	N	GLN A	41	151.151	11.918	-3.503	1.00	0.00
ATOM 564	CA	GLN A	41	151.682	11.767	-4.850	1.00	0.00
ATOM 565	C	GLN A	41	153.178	12.077	-4.881	1.00	0.00
ATOM 566	O	GLN A	41	153.587	13.211	-4.627	1.00	0.00
ATOM 567	CB	GLN A	41	150.936	12.694	-5.810	1.00	0.00
ATOM 568	CG	GLN A	41	149.424	12.612	-5.681	1.00	0.00
ATOM 569	CD	GLN A	41	148.756	13.969	-5.779	1.00	0.00
ATOM 570	OE1	GLN A	41	148.808	14.769	-4.846	1.00	0.00
ATOM 571	NE2	GLN A	41	148.124	14.235	-6.916	1.00	0.00
ATOM 572	H	GLN A	41	151.313	12.753	-3.019	1.00	0.00
ATOM 573	HA	GLN A	41	151.527	10.744	-5.158	1.00	0.00
ATOM 574	1HB	GLN A	41	151.236	13.711	-5.614	1.00	0.00
ATOM 575	2HB	GLN A	41	151.205	12.436	-6.822	1.00	0.00
ATOM 576	1HG	GLN A	41	149.040	11.982	-6.470	1.00	0.00
ATOM 577	2HG	GLN A	41	149.179	12.175	-4.724	1.00	0.00
ATOM 578	1HE2	GLN A	41	148.124	13.549	-7.616	1.00	0.00
ATOM 579	2HE2	GLN A	41	147.685	15.106	-7.009	1.00	0.00
ATOM 580	N	PRO A	42	154.020	11.075	-5.191	1.00	0.00
ATOM 581	CA	PRO A	42	155.475	11.257	-5.248	1.00	0.00
ATOM 582	C	PRO A	42	155.883	12.348	-6.233	1.00	0.00
ATOM 583	O	PRO A	42	155.116	12.706	-7.128	1.00	0.00
ATOM 584	CB	PRO A	42	155.994	9.893	-5.715	1.00	0.00

ATOM 585	CG	PRO A	42	154.914	8.931	-5.358	1.00	0.00
ATOM 586	CD	PRO A	42	153.628	9.690	-5.508	1.00	0.00
ATOM 587	HA	PRO A	42	155.882	11.485	-4.274	1.00	0.00
ATOM 588	1HB	PRO A	42	156.167	9.916	-6.781	1.00	0.00
ATOM 589	2HB	PRO A	42	156.914	9.659	-5.200	1.00	0.00
ATOM 590	1HG	PRO A	42	154.933	8.088	-6.033	1.00	0.00
ATOM 591	2HG	PRO A	42	155.037	8.600	-4.338	1.00	0.00
ATOM 592	1HD	PRO A	42	153.259	9.615	-6.520	1.00	0.00
ATOM 593	2HD	PRO A	42	152.890	9.327	-4.806	1.00	0.00
ATOM 594	N	PRO A	43	157.103	12.891	-6.082	1.00	0.00
ATOM 595	CA	PRO A	43	157.611	13.946	-6.963	1.00	0.00
ATOM 596	C	PRO A	43	157.953	13.424	-8.354	1.00	0.00
ATOM 597	O	PRO A	43	159.092	13.042	-8.621	1.00	0.00
ATOM 598	CB	PRO A	43	158.874	14.427	-6.250	1.00	0.00
ATOM 599	CG	PRO A	43	159.327	13.252	-5.454	1.00	0.00
ATOM 600	CD	PRO A	43	158.079	12.520	-5.041	1.00	0.00
ATOM 601	HA	PRO A	43	156.908	14.763	-7.049	1.00	0.00
ATOM 602	1HB	PRO A	43	159.613	14.718	-6.982	1.00	0.00
ATOM 603	2HB	PRO A	43	158.636	15.266	-5.615	1.00	0.00
ATOM 604	1HG	PRO A	43	159.951	12.615	-6.063	1.00	0.00
ATOM 605	2HG	PRO A	43	159.871	13.587	-4.583	1.00	0.00
ATOM 606	1HD	PRO A	43	158.252	11.454	-5.037	1.00	0.00
ATOM 607	2HD	PRO A	43	157.751	12.855	-4.068	1.00	0.00
ATOM 608	N	GLY A	44	156.960	13.410	-9.236	1.00	0.00
ATOM 609	CA	GLY A	44	157.179	12.932	-10.588	1.00	0.00
ATOM 610	C	GLY A	44	155.901	12.471	-11.257	1.00	0.00
ATOM 611	O	GLY A	44	155.595	12.885	-12.375	1.00	0.00
ATOM 612	H	GLY A	44	156.072	13.725	-8.968	1.00	0.00
ATOM 613	1HA	GLY A	44	157.612	13.728	-11.173	1.00	0.00

ATOM 614	2HA	GLY A	44	157.875	12.105	-10.556	1.00	0.00
ATOM 615	N	LEU A	45	155.154	11.611	-10.574	1.00	0.00
ATOM 616	CA	LEU A	45	153.902	11.095	-11.112	1.00	0.00
ATOM 617	C	LEU A	45	152.735	11.431	-10.190	1.00	0.00
ATOM 618	O	LEU A	45	152.647	10.916	-9.076	1.00	0.00
ATOM 619	CB	LEU A	45	153.993	9.580	-11.306	1.00	0.00
ATOM 620	CG	LEU A	45	154.530	8.806	-10.099	1.00	0.00
ATOM 621	CD1	LEU A	45	154.083	7.352	-10.154	1.00	0.00
ATOM 622	CD2	LEU A	45	156.049	8.900	-10.039	1.00	0.00
ATOM 623	H	LEU A	45	155.450	11.319	-9.685	1.00	0.00
ATOM 624	HA	LEU A	45	153.734	11.562	-12.070	1.00	0.00
ATOM 625	1HB	LEU A	45	153.006	9.208	-11.537	1.00	0.00
ATOM 626	2HB	LEU A	45	154.640	9.384	-12.147	1.00	0.00
ATOM 627	HG	LEU A	45	154.131	9.243	-9.196	1.00	0.00
ATOM 628	1HD1	LEU A	45	153.399	7.155	-9.341	1.00	0.00
ATOM 629	2HD1	LEU A	45	154.943	6.705	-10.064	1.00	0.00
ATOM 630	3HD1	LEU A	45	153.587	7.161	-11.094	1.00	0.00
ATOM 631	1HD2	LEU A	45	156.481	7.939	-10.273	1.00	0.00
ATOM 632	2HD2	LEU A	45	156.351	9.197	-9.044	1.00	0.00
ATOM 633	3HD2	LEU A	45	156.395	9.634	-10.752	1.00	0.00
ATOM 634	N	ASN A	46	151.839	12.293	-10.660	1.00	0.00
ATOM 635	CA	ASN A	46	150.682	12.685	-9.866	1.00	0.00
ATOM 636	C	ASN A	46	149.666	11.550	-9.807	1.00	0.00
ATOM 637	O	ASN A	46	148.992	11.253	-10.792	1.00	0.00
ATOM 638	CB	ASN A	46	150.034	13.937	-10.460	1.00	0.00
ATOM 639	CG	ASN A	46	149.364	14.797	-9.406	1.00	0.00
ATOM 640	OD1	ASN A	46	149.991	15.199	-8.426	1.00	0.00
ATOM 641	ND2	ASN A	46	148.083	15.083	-9.604	1.00	0.00
ATOM 642	H	ASN A	46	151.958	12.670	-11.556	1.00	0.00

ATOM 643	HA	ASN A	46	151.023	12.904	-8.865	1.00	0.00
ATOM 644	1HB	ASN A	46	150.792	14.529	-10.950	1.00	0.00
ATOM 645	2HB	ASN A	46	149.290	13.640	-11.184	1.00	0.00
ATOM 646	1HD2	ASN A	46	147.648	14.729	-10.408	1.00	0.00
ATOM 647	2HD2	ASN A	46	147.625	15.639	-8.939	1.00	0.00
ATOM 648	N	GLU A	47	149.563	10.920	-8.642	1.00	0.00
ATOM 649	CA	GLU A	47	148.631	9.817	-8.447	1.00	0.00
ATOM 650	C	GLU A	47	148.480	9.494	-6.965	1.00	0.00
ATOM 651	O	GLU A	47	149.455	9.161	-6.291	1.00	0.00
ATOM 652	CB	GLU A	47	149.104	8.574	-9.206	1.00	0.00
ATOM 653	CG	GLU A	47	150.611	8.372	-9.178	1.00	0.00
ATOM 654	CD	GLU A	47	151.090	7.413	-10.250	1.00	0.00
ATOM 655	OE1	GLU A	47	151.384	6.246	-9.915	1.00	0.00
ATOM 656	OE2	GLU A	47	151.171	7.829	-11.425	1.00	0.00
ATOM 657	H	GLU A	47	150.130	11.205	-7.896	1.00	0.00
ATOM 658	HA	GLU A	47	147.671	10.122	-8.836	1.00	0.00
ATOM 659	1HB	GLU A	47	148.638	7.703	-8.771	1.00	0.00
ATOM 660	2HB	GLU A	47	148.793	8.658	-10.237	1.00	0.00
ATOM 661	1HG	GLU A	47	151.093	9.326	-9.329	1.00	0.00
ATOM 662	2HG	GLU A	47	150.892	7.978	-8.212	1.00	0.00
ATOM 663	N	VAL A	48	147.255	9.585	-6.461	1.00	0.00
ATOM 664	CA	VAL A	48	146.988	9.294	-5.059	1.00	0.00
ATOM 665	C	VAL A	48	147.302	7.836	-4.743	1.00	0.00
ATOM 666	O	VAL A	48	146.505	6.943	-5.029	1.00	0.00
ATOM 667	CB	VAL A	48	145.522	9.585	-4.689	1.00	0.00
ATOM 668	CG1	VAL A	48	145.318	9.474	-3.186	1.00	0.00
ATOM 669	CG2	VAL A	48	145.108	10.959	-5.192	1.00	0.00
ATOM 670	H	VAL A	48	146.514	9.850	-7.045	1.00	0.00
ATOM 671	HA	VAL A	48	147.625	9.928	-4.458	1.00	0.00

ATOM 672	HB	VAL A	48	144.897	8.846	-5.169	1.00	0.00
ATOM 673	1HG1	VAL A	48	145.394	8.440	-2.887	1.00	0.00
ATOM 674	2HG1	VAL A	48	144.339	9.853	-2.928	1.00	0.00
ATOM 675	3HG1	VAL A	48	146.073	10.054	-2.677	1.00	0.00
ATOM 676	1HG2	VAL A	48	144.413	11.403	-4.495	1.00	0.00
ATOM 677	2HG2	VAL A	48	144.636	10.861	-6.158	1.00	0.00
ATOM 678	3HG2	VAL A	48	145.981	11.589	-5.280	1.00	0.00
ATOM 679	N	LEU A	49	148.472	7.601	-4.156	1.00	0.00
ATOM 680	CA	LEU A	49	148.892	6.250	-3.807	1.00	0.00
ATOM 681	C	LEU A	49	148.847	6.042	-2.299	1.00	0.00
ATOM 682	O	LEU A	49	149.562	6.707	-1.549	1.00	0.00
ATOM 683	CB	LEU A	49	150.306	5.982	-4.327	1.00	0.00
ATOM 684	CG	LEU A	49	150.455	6.034	-5.849	1.00	0.00
ATOM 685	CD1	LEU A	49	151.876	6.420	-6.232	1.00	0.00
ATOM 686	CD2	LEU A	49	150.080	4.696	-6.467	1.00	0.00
ATOM 687	H	LEU A	49	149.066	8.354	-3.954	1.00	0.00
ATOM 688	HA	LEU A	49	148.208	5.558	-4.274	1.00	0.00
ATOM 689	1HB	LEU A	49	150.971	6.715	-3.896	1.00	0.00
ATOM 690	2HB	LEU A	49	150.610	5.002	-3.992	1.00	0.00
ATOM 691	HG	LEU A	49	149.787	6.786	-6.245	1.00	0.00
ATOM 692	1HD1	LEU A	49	152.135	7.354	-5.757	1.00	0.00
ATOM 693	2HD1	LEU A	49	151.942	6.530	-7.304	1.00	0.00
ATOM 694	3HD1	LEU A	49	152.559	5.649	-5.906	1.00	0.00
ATOM 695	1HD2	LEU A	49	149.173	4.330	-6.007	1.00	0.00
ATOM 696	2HD2	LEU A	49	150.878	3.987	-6.303	1.00	0.00
ATOM 697	3HD2	LEU A	49	149.920	4.821	-7.527	1.00	0.00
ATOM 698	N	ALA A	50	148.001	5.118	-1.861	1.00	0.00
ATOM 699	CA	ALA A	50	147.865	4.827	-0.441	1.00	0.00
ATOM 700	C	ALA A	50	148.802	3.700	-0.019	1.00	0.00

ATOM 701	O	ALA A	50	148.655	2.561	-0.462	1.00	0.00
ATOM 702	CB	ALA A	50	146.423	4.471	-0.111	1.00	0.00
ATOM 703	H	ALA A	50	147.456	4.621	-2.506	1.00	0.00
ATOM 704	HA	ALA A	50	148.124	5.723	0.106	1.00	0.00
ATOM 705	1HB	ALA A	50	146.405	3.738	0.682	1.00	0.00
ATOM 706	2HB	ALA A	50	145.943	4.063	-0.988	1.00	0.00
ATOM 707	3HB	ALA A	50	145.896	5.358	0.208	1.00	0.00
ATOM 708	N	GLY A	51	149.764	4.024	0.838	1.00	0.00
ATOM 709	CA	GLY A	51	150.710	3.029	1.304	1.00	0.00
ATOM 710	C	GLY A	51	150.071	2.011	2.229	1.00	0.00
ATOM 711	O	GLY A	51	149.790	2.310	3.390	1.00	0.00
ATOM 712	H	GLY A	51	149.832	4.950	1.156	1.00	0.00
ATOM 713	1HA	GLY A	51	151.122	2.512	0.450	1.00	0.00
ATOM 714	2HA	GLY A	51	151.510	3.526	1.830	1.00	0.00
ATOM 715	N	LEU A	52	149.841	0.808	1.715	1.00	0.00
ATOM 716	CA	LEU A	52	149.231	-0.256	2.503	1.00	0.00
ATOM 717	C	LEU A	52	150.296	-1.119	3.171	1.00	0.00
ATOM 718	O	LEU A	52	151.352	-1.377	2.594	1.00	0.00
ATOM 719	CB	LEU A	52	148.333	-1.124	1.619	1.00	0.00
ATOM 720	CG	LEU A	52	147.158	-0.390	0.972	1.00	0.00
ATOM 721	CD1	LEU A	52	146.581	-1.211	-0.171	1.00	0.00
ATOM 722	CD2	LEU A	52	146.085	-0.087	2.006	1.00	0.00
ATOM 723	H	LEU A	52	150.088	0.631	0.782	1.00	0.00
ATOM 724	HA	LEU A	52	148.627	0.206	3.271	1.00	0.00
ATOM 725	1HB	LEU A	52	148.942	-1.551	0.835	1.00	0.00
ATOM 726	2HB	LEU A	52	147.938	-1.928	2.223	1.00	0.00
ATOM 727	HG	LEU A	52	147.507	0.548	0.565	1.00	0.00
ATOM 728	1HD1	LEU A	52	145.819	-1.874	0.211	1.00	0.00
ATOM 729	2HD1	LEU A	52	147.367	-1.793	-0.630	1.00	0.00



ATOM 730	3HD1	LEU A	52	146.147	-0.550	-0.906	1.00	0.00
ATOM 731	1HD2	LEU A	52	145.114	-0.103	1.534	1.00	0.00
ATOM 732	2HD2	LEU A	52	146.261	0.891	2.432	1.00	0.00
ATOM 733	3HD2	LEU A	52	146.118	-0.831	2.789	1.00	0.00
ATOM 734	N	GLU A	53	150.010	-1.565	4.390	1.00	0.00
ATOM 735	CA	GLU A	53	150.943	-2.400	5.137	1.00	0.00
ATOM 736	C	GLU A	53	150.426	-3.831	5.244	1.00	0.00
ATOM 737	O	GLU A	53	149.452	-4.099	5.948	1.00	0.00
ATOM 738	CB	GLU A	53	151.171	-1.823	6.535	1.00	0.00
ATOM 739	CG	GLU A	53	152.170	-2.613	7.365	1.00	0.00
ATOM 740	CD	GLU A	53	151.776	-2.697	8.827	1.00	0.00
ATOM 741	OE1	GLU A	53	152.274	-3.607	9.524	1.00	0.00
ATOM 742	OE2	GLU A	53	150.970	-1.856	9.275	1.00	0.00
ATOM 743	H	GLU A	53	149.151	-1.326	4.797	1.00	0.00
ATOM 744	HA	GLU A	53	151.882	-2.409	4.604	1.00	0.00
ATOM 745	1HB	GLU A	53	151.536	-0.811	6.440	1.00	0.00
ATOM 746	2HB	GLU A	53	150.229	-1.809	7.064	1.00	0.00
ATOM 747	1HG	GLU A	53	152.236	-3.615	6.968	1.00	0.00
ATOM 748	2HG	GLU A	53	153.135	-2.134	7.295	1.00	0.00
ATOM 749	N	LEU A	54	151.083	-4.747	4.540	1.00	0.00
ATOM 750	CA	LEU A	54	150.690	-6.152	4.556	1.00	0.00
ATOM 751	C	LEU A	54	150.936	-6.770	5.929	1.00	0.00
ATOM 752	O	LEU A	54	151.987	-6.563	6.535	1.00	0.00
ATOM 753	CB	LEU A	54	151.460	-6.929	3.488	1.00	0.00
ATOM 754	CG	LEU A	54	151.434	-6.309	2.090	1.00	0.00
ATOM 755	CD1	LEU A	54	152.561	-6.869	1.236	1.00	0.00
ATOM 756	CD2	LEU A	54	150.087	-6.552	1.425	1.00	0.00
ATOM 757	H	LEU A	54	151.852	-4.472	3.997	1.00	0.00
ATOM 758	HA	LEU A	54	149.635	-6.202	4.335	1.00	0.00

ATOM 759	1HB	LEU A	54	152.490	-7.011	3.805	1.00	0.00
ATOM 760	2HB	LEU A	54	151.042	-7.922	3.424	1.00	0.00
ATOM 761	HG	LEU A	54	151.578	-5.241	2.175	1.00	0.00
ATOM 762	1HD1	LEU A	54	153.480	-6.863	1.804	1.00	0.00
ATOM 763	2HD1	LEU A	54	152.680	-6.260	0.352	1.00	0.00
ATOM 764	3HD1	LEU A	54	152.324	-7.882	0.947	1.00	0.00
ATOM 765	1HD2	LEU A	54	149.633	-7.438	1.847	1.00	0.00
ATOM 766	2HD2	LEU A	54	150.229	-6.692	0.364	1.00	0.00
ATOM 767	3HD2	LEU A	54	149.443	-5.702	1.595	1.00	0.00
ATOM 768	N	GLU A	55	149.958	-7.528	6.413	1.00	0.00
ATOM 769	CA	GLU A	55	150.067	-8.176	7.715	1.00	0.00
ATOM 770	C	GLU A	55	151.139	-9.261	7.696	1.00	0.00
ATOM 771	O	GLU A	55	151.836	-9.478	8.686	1.00	0.00
ATOM 772	CB	GLU A	55	148.722	-8.779	8.123	1.00	0.00
ATOM 773	CG	GLU A	55	147.657	-7.739	8.430	1.00	0.00
ATOM 774	CD	GLU A	55	146.711	-7.512	7.268	1.00	0.00
ATOM 775	OE1	GLU A	55	146.763	-6.420	6.663	1.00	0.00
ATOM 776	OE2	GLU A	55	145.916	-8.426	6.962	1.00	0.00
ATOM 777	H	GLU A	55	149.144	-7.655	5.884	1.00	0.00
ATOM 778	HA	GLU A	55	150.347	-7.424	8.437	1.00	0.00
ATOM 779	1HB	GLU A	55	148.361	-9.404	7.319	1.00	0.00
ATOM 780	2HB	GLU A	55	148.864	-9.388	9.003	1.00	0.00
ATOM 781	1HG	GLU A	55	147.083	-8.069	9.283	1.00	0.00
ATOM 782	2HG	GLU A	55	148.143	-6.803	8.667	1.00	0.00
ATOM 783	N	ASP A	56	151.263	-9.943	6.561	1.00	0.00
ATOM 784	CA	ASP A	56	152.251	-11.006	6.412	1.00	0.00
ATOM 785	C	ASP A	56	153.446	-10.528	5.596	1.00	0.00
ATOM 786	O	ASP A	56	153.285	-9.897	4.551	1.00	0.00
ATOM 787	CB	ASP A	56	151.617	-12.228	5.745	1.00	0.00

ATOM 788	CG	ASP A	56	151.036	-13.201	6.753	1.00	0.00
ATOM 789	OD1	ASP A	56	149.897	-13.665	6.541	1.00	0.00
ATOM 790	OD2	ASP A	56	151.722	-13.498	7.754	1.00	0.00
ATOM 791	H	ASP A	56	150.678	-9.724	5.806	1.00	0.00
ATOM 792	HA	ASP A	56	152.591	-11.281	7.399	1.00	0.00
ATOM 793	1HB	ASP A	56	150.825	-11.902	5.089	1.00	0.00
ATOM 794	2HB	ASP A	56	152.370	-12.744	5.167	1.00	0.00
ATOM 795	N	GLU A	57	154.646	-10.834	6.078	1.00	0.00
ATOM 796	CA	GLU A	57	155.870	-10.436	5.392	1.00	0.00
ATOM 797	C	GLU A	57	155.928	-11.034	3.991	1.00	0.00
ATOM 798	O	GLU A	57	156.352	-12.176	3.810	1.00	0.00
ATOM 799	CB	GLU A	57	157.095	-10.872	6.197	1.00	0.00
ATOM 800	CG	GLU A	57	157.104	-10.349	7.624	1.00	0.00
ATOM 801	CD	GLU A	57	156.564	-11.358	8.618	1.00	0.00
ATOM 802	OE1	GLU A	57	156.945	-11.284	9.805	1.00	0.00
ATOM 803	OE2	GLU A	57	155.759	-12.221	8.210	1.00	0.00
ATOM 804	H	GLU A	57	154.710	-11.339	6.915	1.00	0.00
ATOM 805	HA	GLU A	57	155.869	-9.359	5.311	1.00	0.00
ATOM 806	1HB	GLU A	57	157.123	-11.951	6.233	1.00	0.00
ATOM 807	2HB	GLU A	57	157.985	-10.514	5.700	1.00	0.00
ATOM 808	1HG	GLU A	57	158.120	-10.105	7.898	1.00	0.00
ATOM 809	2HG	GLU A	57	156.496	-9.458	7.671	1.00	0.00
ATOM 810	N	CYS A	58	155.499	-10.256	3.003	1.00	0.00
ATOM 811	CA	CYS A	58	155.502	-10.709	1.617	1.00	0.00
ATOM 812	C	CYS A	58	156.853	-10.442	0.960	1.00	0.00
ATOM 813	O	CYS A	58	157.328	-9.307	0.933	1.00	0.00
ATOM 814	CB	CYS A	58	154.392	-10.013	0.828	1.00	0.00
ATOM 815	SG	CYS A	58	154.271	-10.539	-0.897	1.00	0.00
ATOM 816	H	CYS A	58	155.173	-9.355	3.210	1.00	0.00

ATOM 817	HA	CYS A	58	155.319	-11.773	1.616	1.00	0.00
ATOM 818	1HB	CYS A	58	153.443	-10.217	1.300	1.00	0.00
ATOM 819	2HB	CYS A	58	154.570	-8.947	0.835	1.00	0.00
ATOM 820	HG	CYS A	58	154.021	-11.467	-0.907	1.00	0.00
ATOM 821	N	ALA A	59	157.466	-11.496	0.431	1.00	0.00
ATOM 822	CA	ALA A	59	158.762	-11.375	-0.226	1.00	0.00
ATOM 823	C	ALA A	59	158.686	-10.433	-1.423	1.00	0.00
ATOM 824	O	ALA A	59	157.969	-10.698	-2.389	1.00	0.00
ATOM 825	CB	ALA A	59	159.262	-12.744	-0.661	1.00	0.00
ATOM 826	H	ALA A	59	157.037	-12.376	0.483	1.00	0.00
ATOM 827	HA	ALA A	59	159.463	-10.974	0.491	1.00	0.00
ATOM 828	1HB	ALA A	59	160.333	-12.710	-0.800	1.00	0.00
ATOM 829	2HB	ALA A	59	158.788	-13.021	-1.592	1.00	0.00
ATOM 830	3HB	ALA A	59	159.020	-13.474	0.097	1.00	0.00
ATOM 831	N	GLY A	60	159.428	-9.334	-1.352	1.00	0.00
ATOM 832	CA	GLY A	60	159.430	-8.369	-2.437	1.00	0.00
ATOM 833	C	GLY A	60	158.687	-7.096	-2.082	1.00	0.00
ATOM 834	O	GLY A	60	157.935	-6.561	-2.896	1.00	0.00
ATOM 835	H	GLY A	60	159.979	-9.176	-0.558	1.00	0.00
ATOM 836	1HA	GLY A	60	160.452	-8.119	-2.680	1.00	0.00
ATOM 837	2HA	GLY A	60	158.963	-8.816	-3.302	1.00	0.00
ATOM 838	N	CYS A	61	158.897	-6.610	-0.863	1.00	0.00
ATOM 839	CA	CYS A	61	158.240	-5.392	-0.402	1.00	0.00
ATOM 840	C	CYS A	61	159.222	-4.494	0.343	1.00	0.00
ATOM 841	O	CYS A	61	160.342	-4.903	0.652	1.00	0.00
ATOM 842	CB	CYS A	61	157.058	-5.738	0.505	1.00	0.00
ATOM 843	SG	CYS A	61	155.845	-6.842	-0.254	1.00	0.00
ATOM 844	H	CYS A	61	159.508	-7.081	-0.258	1.00	0.00
ATOM 845	HA	CYS A	61	157.875	-4.863	-1.270	1.00	0.00

ATOM 846	1HB	CYS A	61	157.427	-6.219	1.397	1.00	0.00
ATOM 847	2HB	CYS A	61	156.547	-4.826	0.779	1.00	0.00
ATOM 848	HG	CYS A	61	154.969	-6.511	-0.042	1.00	0.00
ATOM 849	N	THR A	62	158.796	-3.268	0.629	1.00	0.00
ATOM 850	CA	THR A	62	159.637	-2.311	1.338	1.00	0.00
ATOM 851	C	THR A	62	159.197	-2.171	2.790	1.00	0.00
ATOM 852	O	THR A	62	158.253	-2.829	3.230	1.00	0.00
ATOM 853	CB	THR A	62	159.591	-0.949	0.645	1.00	0.00
ATOM 854	OG1	THR A	62	158.350	-0.308	0.879	1.00	0.00
ATOM 855	CG2	THR A	62	159.791	-1.031	-0.853	1.00	0.00
ATOM 856	H	THR A	62	157.894	-3.000	0.357	1.00	0.00
ATOM 857	HA	THR A	62	160.651	-2.682	1.316	1.00	0.00
ATOM 858	HB	THR A	62	160.376	-0.325	1.050	1.00	0.00
ATOM 859	HG1	THR A	62	157.639	-0.850	0.529	1.00	0.00
ATOM 860	1HG2	THR A	62	158.928	-1.498	-1.305	1.00	0.00
ATOM 861	2HG2	THR A	62	160.671	-1.618	-1.067	1.00	0.00
ATOM 862	3HG2	THR A	62	159.913	-0.036	-1.254	1.00	0.00
ATOM 863	N	ASP A	63	159.886	-1.310	3.533	1.00	0.00
ATOM 864	CA	ASP A	63	159.564	-1.083	4.937	1.00	0.00
ATOM 865	C	ASP A	63	158.915	0.283	5.133	1.00	0.00
ATOM 866	O	ASP A	63	159.079	0.916	6.177	1.00	0.00
ATOM 867	CB	ASP A	63	160.827	-1.189	5.794	1.00	0.00
ATOM 868	CG	ASP A	63	161.869	-0.155	5.418	1.00	0.00
ATOM 869	OD1	ASP A	63	162.279	0.624	6.304	1.00	0.00
ATOM 870	OD2	ASP A	63	162.277	-0.124	4.237	1.00	0.00
ATOM 871	H	ASP A	63	160.627	-0.815	3.126	1.00	0.00
ATOM 872	HA	ASP A	63	158.866	-1.847	5.245	1.00	0.00
ATOM 873	1HB	ASP A	63	160.564	-1.046	6.832	1.00	0.00
ATOM 874	2HB	ASP A	63	161.258	-2.171	5.668	1.00	0.00

ATOM 875	N	GLY A	64	158.180	0.734	4.122	1.00	0.00
ATOM 876	CA	GLY A	64	157.517	2.023	4.204	1.00	0.00
ATOM 877	C	GLY A	64	158.203	3.081	3.362	1.00	0.00
ATOM 878	O	GLY A	64	158.146	4.269	3.680	1.00	0.00
ATOM 879	H	GLY A	64	158.085	0.187	3.315	1.00	0.00
ATOM 880	1HA	GLY A	64	156.498	1.913	3.865	1.00	0.00
ATOM 881	2HA	GLY A	64	157.511	2.347	5.233	1.00	0.00
ATOM 882	N	THR A	65	158.852	2.650	2.285	1.00	0.00
ATOM 883	CA	THR A	65	159.552	3.569	1.395	1.00	0.00
ATOM 884	C	THR A	65	159.130	3.350	-0.054	1.00	0.00
ATOM 885	O	THR A	65	159.318	2.267	-0.609	1.00	0.00
ATOM 886	CB	THR A	65	161.065	3.392	1.530	1.00	0.00
ATOM 887	OG1	THR A	65	161.396	2.023	1.693	1.00	0.00
ATOM 888	CG2	THR A	65	161.654	4.148	2.700	1.00	0.00
ATOM 889	H	THR A	65	158.861	1.690	2.085	1.00	0.00
ATOM 890	HA	THR A	65	159.290	4.576	1.685	1.00	0.00
ATOM 891	HB	THR A	65	161.541	3.751	0.629	1.00	0.00
ATOM 892	HG1	THR A	65	161.415	1.594	0.834	1.00	0.00
ATOM 893	1HG2	THR A	65	160.857	4.539	3.315	1.00	0.00
ATOM 894	2HG2	THR A	65	162.259	4.965	2.333	1.00	0.00
ATOM 895	3HG2	THR A	65	162.268	3.482	3.288	1.00	0.00
ATOM 896	N	PHE A	66	158.560	4.385	-0.663	1.00	0.00
ATOM 897	CA	PHE A	66	158.112	4.304	-2.048	1.00	0.00
ATOM 898	C	PHE A	66	159.029	5.108	-2.965	1.00	0.00
ATOM 899	O	PHE A	66	159.115	6.331	-2.857	1.00	0.00
ATOM 900	CB	PHE A	66	156.675	4.814	-2.172	1.00	0.00
ATOM 901	CG	PHE A	66	156.029	4.474	-3.484	1.00	0.00
ATOM 902	CD1	PHE A	66	155.625	5.475	-4.354	1.00	0.00
ATOM 903	CD2	PHE A	66	155.826	3.153	-3.849	1.00	0.00

ATOM 904	CE1	PHE A	66	155.032	5.165	-5.562	1.00	0.00
ATOM 905	CE2	PHE A	66	155.232	2.836	-5.057	1.00	0.00
ATOM 906	CZ	PHE A	66	154.834	3.843	-5.914	1.00	0.00
ATOM 907	H	PHE A	66	158.438	5.222	-0.168	1.00	0.00
ATOM 908	HA	PHE A	66	158.143	3.268	-2.347	1.00	0.00
ATOM 909	1HB	PHE A	66	156.077	4.380	-1.385	1.00	0.00
ATOM 910	2HB	PHE A	66	156.672	5.890	-2.068	1.00	0.00
ATOM 911	HD1	PHE A	66	155.780	6.509	-4.080	1.00	0.00
ATOM 912	HD2	PHE A	66	156.137	2.364	-3.179	1.00	0.00
ATOM 913	HE1	PHE A	66	154.721	5.954	-6.231	1.00	0.00
ATOM 914	HE2	PHE A	66	155.080	1.803	-5.329	1.00	0.00
ATOM 915	HZ	PHE A	66	154.371	3.598	-6.858	1.00	0.00
ATOM 916	N	ARG A	67	159.713	4.411	-3.867	1.00	0.00
ATOM 917	CA	ARG A	67	160.624	5.059	-4.803	1.00	0.00
ATOM 918	C	ARG A	67	161.735	5.794	-4.062	1.00	0.00
ATOM 919	O	ARG A	67	162.174	6.864	-4.482	1.00	0.00
ATOM 920	CB	ARG A	67	159.858	6.036	-5.698	1.00	0.00
ATOM 921	CG	ARG A	67	158.819	5.365	-6.581	1.00	0.00
ATOM 922	CD	ARG A	67	158.307	6.310	-7.654	1.00	0.00
ATOM 923	NE	ARG A	67	159.178	6.330	-8.827	1.00	0.00
ATOM 924	CZ	ARG A	67	159.307	5.310	-9.672	1.00	0.00
ATOM 925	NH1	ARG A	67	158.624	4.189	-9.480	1.00	0.00
ATOM 926	NH2	ARG A	67	160.122	5.412	-10.714	1.00	0.00
ATOM 927	H	ARG A	67	159.602	3.438	-3.904	1.00	0.00
ATOM 928	HA	ARG A	67	161.066	4.291	-5.420	1.00	0.00
ATOM 929	1HB	ARG A	67	159.357	6.759	-5.074	1.00	0.00
ATOM 930	2HB	ARG A	67	160.564	6.549	-6.336	1.00	0.00
ATOM 931	1HG	ARG A	67	159.266	4.504	-7.056	1.00	0.00
ATOM 932	2HG	ARG A	67	157.989	5.048	-5.965	1.00	0.00

ATOM 933	1HD	ARG A	67	157.321	5.990	-7.957	1.00	0.00
ATOM 934	2HD	ARG A	67	158.250	7.306	-7.242	1.00	0.00
ATOM 935	HE	ARG A	67	159.695	7.147	-8.993	1.00	0.00
ATOM 936	1HH1	ARG A	67	158.008	4.106	-8.697	1.00	0.00
ATOM 937	2HH1	ARG A	67	158.725	3.426	-10.119	1.00	0.00
ATOM 938	1HH2	ARG A	67	160.639	6.254	-10.864	1.00	0.00
ATOM 939	2HH2	ARG A	67	160.219	4.646	-11.348	1.00	0.00
ATOM 940	N	GLY A	68	162.187	5.212	-2.955	1.00	0.00
ATOM 941	CA	GLY A	68	163.243	5.827	-2.173	1.00	0.00
ATOM 942	C	GLY A	68	162.762	7.037	-1.396	1.00	0.00
ATOM 943	O	GLY A	68	163.536	7.953	-1.119	1.00	0.00
ATOM 944	H	GLY A	68	161.800	4.359	-2.667	1.00	0.00
ATOM 945	1HA	GLY A	68	163.632	5.098	-1.478	1.00	0.00
ATOM 946	2HA	GLY A	68	164.037	6.132	-2.838	1.00	0.00
ATOM 947	N	THR A	69	161.481	7.040	-1.044	1.00	0.00
ATOM 948	CA	THR A	69	160.897	8.147	-0.295	1.00	0.00
ATOM 949	C	THR A	69	160.046	7.632	0.861	1.00	0.00
ATOM 950	O	THR A	69	158.867	7.323	0.687	1.00	0.00
ATOM 951	CB	THR A	69	160.049	9.023	-1.217	1.00	0.00
ATOM 952	OG1	THR A	69	160.737	9.293	-2.425	1.00	0.00
ATOM 953	CG2	THR A	69	159.669	10.351	-0.598	1.00	0.00
ATOM 954	H	THR A	69	160.914	6.280	-1.294	1.00	0.00
ATOM 955	HA	THR A	69	161.706	8.738	0.105	1.00	0.00
ATOM 956	HB	THR A	69	159.135	8.498	-1.457	1.00	0.00
ATOM 957	HG1	THR A	69	161.578	9.711	-2.228	1.00	0.00
ATOM 958	1HG2	THR A	69	160.045	11.156	-1.213	1.00	0.00
ATOM 959	2HG2	THR A	69	160.099	10.423	0.390	1.00	0.00
ATOM 960	3HG2	THR A	69	158.594	10.423	-0.530	1.00	0.00
ATOM 961	N	ARG A	70	160.651	7.542	2.041	1.00	0.00



ATOM 962	CA	ARG A	70	159.949	7.064	3.226	1.00	0.00
ATOM 963	C	ARG A	70	158.808	8.005	3.600	1.00	0.00
ATOM 964	O	ARG A	70	158.979	9.224	3.623	1.00	0.00
ATOM 965	CB	ARG A	70	160.920	6.931	4.401	1.00	0.00
ATOM 966	CG	ARG A	70	160.340	6.178	5.588	1.00	0.00
ATOM 967	CD	ARG A	70	160.741	6.817	6.909	1.00	0.00
ATOM 968	NE	ARG A	70	161.752	6.032	7.613	1.00	0.00
ATOM 969	CZ	ARG A	70	163.055	6.085	7.344	1.00	0.00
ATOM 970	NH1	ARG A	70	163.511	6.883	6.385	1.00	0.00
ATOM 971	NH2	ARG A	70	163.905	5.337	8.033	1.00	0.00
ATOM 972	H	ARG A	70	161.592	7.802	2.115	1.00	0.00
ATOM 973	HA	ARG A	70	159.538	6.091	2.999	1.00	0.00
ATOM 974	1HB	ARG A	70	161.803	6.407	4.066	1.00	0.00
ATOM 975	2HB	ARG A	70	161.203	7.920	4.732	1.00	0.00
ATOM 976	1HG	ARG A	70	159.263	6.180	5.511	1.00	0.00
ATOM 977	2HG	ARG A	70	160.703	5.159	5.566	1.00	0.00
ATOM 978	1HD	ARG A	70	161.136	7.802	6.714	1.00	0.00
ATOM 979	2HD	ARG A	70	159.863	6.899	7.533	1.00	0.00
ATOM 980	HE	ARG A	70	161.444	5.432	8.325	1.00	0.00
ATOM 981	1HH1	ARG A	70	162.877	7.450	5.861	1.00	0.00
ATOM 982	2HH1	ARG A	70	164.491	6.919	6.190	1.00	0.00
ATOM 983	1HH2	ARG A	70	163.567	4.734	8.756	1.00	0.00
ATOM 984	2HH2	ARG A	70	164.884	5.377	7.832	1.00	0.00
ATOM 985	N	TYR A	71	157.646	7.431	3.890	1.00	0.00
ATOM 986	CA	TYR A	71	156.476	8.218	4.264	1.00	0.00
ATOM 987	C	TYR A	71	156.055	7.920	5.700	1.00	0.00
ATOM 988	O	TYR A	71	155.648	8.817	6.437	1.00	0.00
ATOM 989	CB	TYR A	71	155.316	7.932	3.309	1.00	0.00
ATOM 990	CG	TYR A	71	155.479	8.569	1.948	1.00	0.00

ATOM 991	CD1	TYR A	71	155.397	7.809	0.788	1.00	0.00
ATOM 992	CD2	TYR A	71	155.717	9.933	1.823	1.00	0.00
ATOM 993	CE1	TYR A	71	155.547	8.389	-0.457	1.00	0.00
ATOM 994	CE2	TYR A	71	155.867	10.520	0.581	1.00	0.00
ATOM 995	CZ	TYR A	71	155.781	9.745	-0.555	1.00	0.00
ATOM 996	OH	TYR A	71	155.931	10.325	-1.793	1.00	0.00
ATOM 997	H	TYR A	71	157.572	6.454	3.855	1.00	0.00
ATOM 998	HA	TYR A	71	156.742	9.262	4.190	1.00	0.00
ATOM 999	1HB	TYR A	71	155.232	6.864	3.166	1.00	0.00
ATOM 1000	2HB	TYR A	71	154.401	8.305	3.744	1.00	0.00
ATOM 1001	HD1	TYR A	71	155.213	6.748	0.869	1.00	0.00
ATOM 1002	HD2	TYR A	71	155.785	10.538	2.716	1.00	0.00
ATOM 1003	HE1	TYR A	71	155.480	7.781	-1.347	1.00	0.00
ATOM 1004	HE2	TYR A	71	156.051	11.581	0.506	1.00	0.00
ATOM 1005	HH	TYR A	71	155.460	11.161	-1.814	1.00	0.00
ATOM 1006	N	PHE A	72	156.155	6.653	6.089	1.00	0.00
ATOM 1007	CA	PHE A	72	155.784	6.235	7.436	1.00	0.00
ATOM 1008	C	PHE A	72	156.783	5.220	7.984	1.00	0.00
ATOM 1009	O	PHE A	72	157.758	4.872	7.320	1.00	0.00
ATOM 1010	CB	PHE A	72	154.378	5.635	7.437	1.00	0.00
ATOM 1011	CG	PHE A	72	154.144	4.648	6.328	1.00	0.00
ATOM 1012	CD1	PHE A	72	153.812	5.083	5.055	1.00	0.00
ATOM 1013	CD2	PHE A	72	154.258	3.287	6.559	1.00	0.00
ATOM 1014	CE1	PHE A	72	153.598	4.179	4.033	1.00	0.00
ATOM 1015	CE2	PHE A	72	154.045	2.378	5.541	1.00	0.00
ATOM 1016	CZ	PHE A	72	153.714	2.824	4.276	1.00	0.00
ATOM 1017	H	PHE A	72	156.486	5.982	5.455	1.00	0.00
ATOM 1018	HA	PHE A	72	155.795	7.110	8.068	1.00	0.00
ATOM 1019	1HB	PHE A	72	154.212	5.125	8.375	1.00	0.00

ATOM 1020	2HB	PHE A	72	153.654	6.431	7.333	1.00	0.00
ATOM 1021	HD1	PHE A	72	153.721	6.142	4.864	1.00	0.00
ATOM 1022	HD2	PHE A	72	154.517	2.937	7.548	1.00	0.00
ATOM 1023	HE1	PHE A	72	153.338	4.530	3.045	1.00	0.00
ATOM 1024	HE2	PHE A	72	154.137	1.319	5.734	1.00	0.00
ATOM 1025	HZ	PHE A	72	153.547	2.115	3.479	1.00	0.00
ATOM 1026	N	THR A	73	156.533	4.750	9.202	1.00	0.00
ATOM 1027	CA	THR A	73	157.409	3.775	9.840	1.00	0.00
ATOM 1028	C	THR A	73	156.665	2.470	10.108	1.00	0.00
ATOM 1029	O	THR A	73	155.816	2.398	10.997	1.00	0.00
ATOM 1030	CB	THR A	73	157.964	4.337	11.151	1.00	0.00
ATOM 1031	OG1	THR A	73	157.040	5.231	11.743	1.00	0.00
ATOM 1032	CG2	THR A	73	159.273	5.077	10.977	1.00	0.00
ATOM 1033	H	THR A	73	155.738	5.066	9.682	1.00	0.00
ATOM 1034	HA	THR A	73	158.230	3.576	9.168	1.00	0.00
ATOM 1035	HB	THR A	73	158.133	3.520	11.837	1.00	0.00
ATOM 1036	HG1	THR A	73	157.405	5.572	12.564	1.00	0.00
ATOM 1037	1HG2	THR A	73	159.290	5.554	10.008	1.00	0.00
ATOM 1038	2HG2	THR A	73	160.093	4.377	11.048	1.00	0.00
ATOM 1039	3HG2	THR A	73	159.369	5.824	11.749	1.00	0.00
ATOM 1040	N	CYS A	74	156.991	1.440	9.335	1.00	0.00
ATOM 1041	CA	CYS A	74	156.354	0.138	9.488	1.00	0.00
ATOM 1042	C	CYS A	74	157.390	-0.982	9.465	1.00	0.00
ATOM 1043	O	CYS A	74	158.591	-0.728	9.368	1.00	0.00
ATOM 1044	CB	CYS A	74	155.323	-0.083	8.379	1.00	0.00
ATOM 1045	SG	CYS A	74	153.706	0.652	8.718	1.00	0.00
ATOM 1046	H	CYS A	74	157.676	1.559	8.643	1.00	0.00
ATOM 1047	HA	CYS A	74	155.850	0.125	10.442	1.00	0.00
ATOM 1048	1HB	CYS A	74	155.694	0.350	7.462	1.00	0.00

ATOM 1049	2HB	CYS A	74	155.180	-1.144	8.237	1.00	0.00
ATOM 1050	HG	CYS A	74	153.749	1.078	9.577	1.00	0.00
ATOM 1051	N	ALA A	75	156.918	-2.220	9.553	1.00	0.00
ATOM 1052	CA	ALA A	75	157.803	-3.378	9.542	1.00	0.00
ATOM 1053	C	ALA A	75	158.397	-3.602	8.156	1.00	0.00
ATOM 1054	O	ALA A	75	157.882	-3.095	7.160	1.00	0.00
ATOM 1055	CB	ALA A	75	157.053	-4.619	10.004	1.00	0.00
ATOM 1056	H	ALA A	75	155.951	-2.359	9.628	1.00	0.00
ATOM 1057	HA	ALA A	75	158.605	-3.190	10.241	1.00	0.00
ATOM 1058	1HB	ALA A	75	157.153	-4.723	11.074	1.00	0.00
ATOM 1059	2HB	ALA A	75	157.466	-5.490	9.518	1.00	0.00
ATOM 1060	3HB	ALA A	75	156.008	-4.525	9.747	1.00	0.00
ATOM 1061	N	LEU A	76	159.484	-4.366	8.100	1.00	0.00
ATOM 1062	CA	LEU A	76	160.148	-4.658	6.836	1.00	0.00
ATOM 1063	C	LEU A	76	159.378	-5.712	6.046	1.00	0.00
ATOM 1064	O	LEU A	76	158.795	-6.631	6.623	1.00	0.00
ATOM 1065	CB	LEU A	76	161.579	-5.137	7.087	1.00	0.00
ATOM 1066	CG	LEU A	76	162.627	-4.025	7.176	1.00	0.00
ATOM 1067	CD1	LEU A	76	163.728	-4.406	8.153	1.00	0.00
ATOM 1068	CD2	LEU A	76	163.208	-3.731	5.802	1.00	0.00
ATOM 1069	H	LEU A	76	159.846	-4.742	8.929	1.00	0.00
ATOM 1070	HA	LEU A	76	160.179	-3.745	6.259	1.00	0.00
ATOM 1071	1HB	LEU A	76	161.593	-5.692	8.013	1.00	0.00
ATOM 1072	2HB	LEU A	76	161.861	-5.800	6.284	1.00	0.00
ATOM 1073	HG	LEU A	76	162.155	-3.124	7.541	1.00	0.00
ATOM 1074	1HD1	LEU A	76	164.661	-3.965	7.834	1.00	0.00
ATOM 1075	2HD1	LEU A	76	163.828	-5.481	8.180	1.00	0.00
ATOM 1076	3HD1	LEU A	76	163.476	-4.044	9.139	1.00	0.00
ATOM 1077	1HD2	LEU A	76	164.135	-4.272	5.681	1.00	0.00

ATOM 1078	2HD2	LEU A	76	163.395	-2.671	5.708	1.00	0.00
ATOM 1079	3HD2	LEU A	76	162.508	-4.041	5.040	1.00	0.00
ATOM 1080	N	LYS A	77	159.379	-5.572	4.724	1.00	0.00
ATOM 1081	CA	LYS A	77	158.681	-6.513	3.857	1.00	0.00
ATOM 1082	C	LYS A	77	157.188	-6.536	4.170	1.00	0.00
ATOM 1083	O	LYS A	77	156.545	-7.584	4.103	1.00	0.00
ATOM 1084	CB	LYS A	77	159.268	-7.917	4.011	1.00	0.00
ATOM 1085	CG	LYS A	77	160.742	-8.002	3.648	1.00	0.00
ATOM 1086	CD	LYS A	77	160.936	-8.190	2.152	1.00	0.00
ATOM 1087	CE	LYS A	77	162.179	-7.470	1.656	1.00	0.00
ATOM 1088	NZ	LYS A	77	162.702	-8.067	0.396	1.00	0.00
ATOM 1089	H	LYS A	77	159.861	-4.819	4.324	1.00	0.00
ATOM 1090	HA	LYS A	77	158.816	-6.185	2.837	1.00	0.00
ATOM 1091	1HB	LYS A	77	159.154	-8.231	5.038	1.00	0.00
ATOM 1092	2HB	LYS A	77	158.722	-8.595	3.373	1.00	0.00
ATOM 1093	1HG	LYS A	77	161.232	-7.089	3.952	1.00	0.00
ATOM 1094	2HG	LYS A	77	161.183	-8.840	4.168	1.00	0.00
ATOM 1095	1HD	LYS A	77	161.036	-9.245	1.942	1.00	0.00
ATOM 1096	2HD	LYS A	77	160.073	-7.799	1.634	1.00	0.00
ATOM 1097	1HE	LYS A	77	161.932	-6.434	1.478	1.00	0.00
ATOM 1098	2HE	LYS A	77	162.943	-7.531	2.418	1.00	0.00
ATOM 1099	1HZ	LYS A	77	162.608	-9.102	0.425	1.00	0.00
ATOM 1100	2HZ	LYS A	77	163.706	-7.824	0.274	1.00	0.00
ATOM 1101	3HZ	LYS A	77	162.168	-7.703	-0.419	1.00	0.00
ATOM 1102	N	LYS A	78	156.643	-5.373	4.513	1.00	0.00
ATOM 1103	CA	LYS A	78	155.224	-5.259	4.837	1.00	0.00
ATOM 1104	C	LYS A	78	154.686	-3.886	4.449	1.00	0.00
ATOM 1105	O	LYS A	78	153.863	-3.308	5.158	1.00	0.00
ATOM 1106	CB	LYS A	78	155.000	-5.505	6.330	1.00	0.00